VERMONT

State of Vermont
Policy, Planning & Intermodal Development Division
Policy, Planning and Research Bureau
Development Review & Permitting Services Section
One National Life Drive
Montpelier, VT 05633-5001
vtrans.vermont.gov

Agency of Transportation

[phone] 802-828-2653
[fax] 802-828-2456
[ttd] 800-253-0191

! LETTER OF INTENT !
THIS IS NOT A PERMIT

May 5, 2015

Town Of Dover
Ken Black
P.O. Box 428
West Dover, VT 05356

Subject: Dover, VT100, L.S. 47+52 ~ 68+37 LT & RT
Dover STP EH12(3) – Dover Valley Trail, Segment A Sidewalk

Dear Mr. Black:

Your highway permit application to construct a sidewalk with associated drainage improvements, signage, pavement markings, lighting, landscaping and other incidental highway items, at the above-referenced location, has been reviewed and found to meet the requirements for work within the highway right-of-way.

As a condition of this permit, the Contractor must sign the highway permit application as the Co-Applicant prior to the start of construction. Following our receipt of the application with this signature, your permit will be issued. We are returning the original application so you may obtain this signature following the contract bid award.

When issued, the permit will contain, but will not be limited to, the attached Special Conditions.

This commitment is valid for two years from the date of this letter. Should your other permits require a longer time period, please contact us relative to an extension of time.

This Letter of Intent addresses only access to, work within, and drainage affecting the State highway. It does not address other possible transportation issues, such as access to town highways, use of private roads, and use of railroad crossings. If relevant to the proposed development, such issues must be addressed separately.

If you have any further questions about this matter, please call me at (802) 828-2473.

Sincerely,

Theresa C. Gilman
Permitting Services Supervisor
Permitting Services Section

Attachment

Reviewed by: Craig Keller Date: 5/6/15
Craig S. Keller, P.E., Chief of Permitting Services

cc: Windham Regional Commission
Roger Dickenson, L&D Consulting Engineers, Inc

bcc: District Transportation Office #1
Files

Rachael Beaupre-Laird

SPECIAL CONDITIONS

Prior to the issuance of this Permit the Contractor must sign the highway permit application as the Co-Applicant prior to start of construction. Following our receipt of the application with this signature, your permit will be issued.

This permit is granted subject to the restrictions and conditions on the back of the permit, with particular attention given to the Special Conditions listed below. This permit pertains only to the authority exercised by the Vermont Agency of Transportation (Agency) under Vermont Statutes Annotated, Title 19, Section 1111, and does not relieve the Permit Holder from the requirements of otherwise applicable statutes, rules, regulations or ordinances (*e.g.*, Act 250, zoning, etc.). The Permit Holder shall observe and comply with all Federal and State laws and local bylaws, ordinances, and regulations in any manner affecting the conduct of the work and the action or operation of those engaged in the work, including all orders or decrees as exist at present and those which may be enacted later by bodies or tribunals having jurisdiction or authority over the work, and the Permit Holder shall defend, indemnify, and save harmless the State and all its officers, agents, and employees against any claim or liability arising from or based on the violation of any such law, bylaws, ordinances, regulations, order, or decree, whether by the Permit Holder in person, by an employee of the Permit Holder, by a person or entity hired by the Permit Holder, or by a Subcontractor or supplier.

The Permit Holder shall accomplish all work under this permit in accordance with the project plans and associated contract documents for the project entitled, DOVER VALLEY TRAIL SEGMENT A SIDEWALK (copy attached), and any future revisions or amendments to these plans; and, the COOPERTIVE AGREEMENT BETWEEN THE STATE OF VERMONT AGENCY OF TRANSPORTATION AND THE TOWN OF DOVER, CONTRACT #EH0066 AND ALL SUBSEQUENT AMENDMENTS.

The Town of Dover shall be responsible for the future maintenance of the permitted sidewalk including but not limited to, winter snow and ice removal when deemed appropriate.

A preconstruction meeting to discuss work to be completed must be held prior to the Permit Holder's employees or contractor beginning work. The Permit Holder is required to notify the District Transportation Administrator five (5) working days in advance of such meeting.

Please note that many municipalities and the Vermont Agency of Transportation are not members of Dig Safe. The Permit Holder shall the municipality and VTrans' Tim Sweeney at (802) 279-0585 so they may review, locate and mark all existing buried utility facilities owned they own near the location of the proposed work.

Roadway shoulder areas must be maintained free of unnecessary obstructions, including parked vehicles, at all times while work is being performed under this permit.

All grading within the State Highway right-of-way associated with the proposed construction shall be subject to inspection and approval by the District Transportation Administrator or his or her staff. The Permit Holder shall be responsible for ensuring that all grading work in or on the State Highway right-of-way complies with applicable statutes, rules, regulations or ordinances.

In areas to be grass covered, the Permit Holder shall restore turf by preparing the area and applying the necessary topsoil, limestone, fertilizer, seed, and mulch, all to the satisfaction of the District Transportation Administrator. The Permit Holder shall be responsible for ensuring that all turf restoration work in or on the State Highway right-of-way is in compliance with applicable statutes, rules, regulations or ordinances.

The placement, size, shape, and color of all pavement markings and signage must be in accordance with the most recent editions of the MUTCD (Manual on Uniform Traffic Control Devices) and Vermont standards. All existing pavement markings that become disturbed or overlaid with pavement shall be replaced by the Permit Holder with "in kind" (durable or paint) markings to the satisfaction of the District Transportation Administrator. The Permit Holder shall bear all costs associated with this work.

The Permit Holder shall be responsible for the all costs associated with the maintenance and operation of the street lighting. In the event that area lighting proves to be a hazard to the traveling public, the Permit Holder will be ordered to remove or modify it at his or her expense to the satisfaction of the District Transportation Administrator.

The Permit Holder must exercise extreme care when working adjacent to existing storm drainage pipes and drop inlets owned by the State. Any damage caused by the Permit Holder to the storm drainage system must be repaired using new materials at the expense of the Permit Holder. Repairs must be inspected by the District Transportation Administrator.

Relocated and/or new sign assemblies shall be installed in accordance with the Manual of Uniform Traffic Control Devices (MUTCD). Any damage by the Contractor to existing signs, posts, and/or bases shall be repaired or replaced at the expense of the Permit Holder and the to the satisfaction of the District Transportation Administrator.

All materials and construction practices shall be in accordance with the Vermont Agency of Transportation *2011 Standard Specifications for Construction*, with the latest amendments and all applicable Vermont Agency of Transportation Standard Drawings.

Upon completion of the work, the Permit Holder shall be responsible to schedule and hold a final inspection. The Permit Holder is required to notify the District Transportation Administrator five (5) working days in advance of such inspection.

Should any portion of the utility facility (street lighting and associated appurtenaces) installed within the State Highway right-of-way require relocation due to future highway improvements, the Permit Holder shall bear all expenses, and all necessary adjustments shall be completed in a timely manner.

The highway crossing shall be installed by jacking or boring in accordance with the project plans, the Agency's D-20 Standard Drawing and VTrans 2011 Standard Specifications for Construction and the latest amendments thereof.

The Permit Holder must backfill all open trenches or pits at the end of each day. With permission from the District Transportation Administrator, trenches or pits may be left open for short periods of time if properly protected. In no case shall trenches or pits be left open over a weekend. The Permit Holder shall be responsible for ensuring that all trench or pit work in or on the State Highway right-of-way is in compliance with applicable statutes, rules, regulations or ordinances.

Where a trench is excavated within the roadbed, all backfill material within 24 inches of the bottom of pavement shall be new material from a source approved by the District Transportation Administrator. The Permit Holder shall place all backfill material in six inch layers and compacted to not less than 95% of the material's maximum dry density as determined by AASHTO (American Association of State Highway and Transportation Officials) Standard Method of Test, T-99, Method C, using air or mechanical tampers. *(This is a contingency condition in the event the "open cut method" is approved during construction.)*

The Permit Holder must install temporary pavement prior to weekend shutdown after completion of backfilling where an open cut excavation has been made through a roadway subject to vehicular traffic or where construction for any roadway widening for turn lanes has been brought to grade. The temporary pavement shall consist of, at least, 2 inches of compacted bituminous concrete. Temporary pavement shall be properly maintained and shall be replaced with permanent pavement prior to completion of the project or suspension of work for the winter season. *(This is a contingency condition in the event the "open cut method" is approved during construction.)*

The Permit Holder shall install an underground utility warning tape, tracer wire system to detect or other devices so as to locate and identify the approved underground utility facility (electrical conduit for lighting). As part of the final inspection the District Transportation Administrator may require a conductivity test prior to acceptance of the work. Additionally, if the utility warning system becomes unreliable or inoperable in the future the Agency may require that the Permit Holder repair or install a replacement system.

The Permit Holder shall promptly and unconditionally pay for full repair and restoration of any and all damages to existing underground utility facilities (meaning any underground pipe, conduit, wire or cable, including appurtenances) that have been brought about by the execution of the permitted work. The Permit Holder also is required to pay for any costs to repair the highway following and resulting from any repairs to existing utilities occurring as a result of the work covered by this permit. Except with the specific, written permission of the Engineer, the Permit Holder or his or her contractor shall expose all underground facilities to verify their location and depth, at each location where the authorized boring or drilling work crosses a facility; and at reasonable intervals when closely paralleling a facility. Whenever possible, existing facilities should be crossed at a perpendicular angle. The Permit Holder shall be responsible for obtaining the modification of this permit, if necessary, for any additional survey work before initiating boring or drilling operations under the permit. The Agency will treat the Permit Holder's failure to fully, promptly, and conscientiously comply with all of conditions of this paragraph, including but not limited to the obligation to pay for repairs, as grounds for the Agency to refuse to grant any further requests by the Permit Holder for any other permits for subsurface work unless the Permit Holder furnishes irrevocable financial security, in a type and an amount deemed sufficient by the Agency in its sole discretion, prior to such future subsurface work.

This permit only authorizes the Permit Holder's stormwater discharge from the defined area approved by the Agency and specified in the Permit Holder's application. The Permit Holder shall not connect (or allow the connection of) non-stormwater drainage systems, such as floor drains, to the stormwater management system that discharges to the Agency's stormwater management system.

All stormwater from the defined area approved by the Agency to discharge into the State Highway right-of-way shall be pre-treated (to the maximum extent practicable on the Permit Holder's land) for water volume, velocity, and quality prior to discharging into the Agency's stormwater management system.

The Permit Holder shall erect and maintain all necessary site erosion prevention and sediment control measures to maintain compliance with Vermont Water Quality Standards within the State Highway right-of-way. All exposed earth areas having erosion potential must be temporarily or permanently stabilized within seven (7) days of disturbance or as necessary to prevent sediment from entering the Agency's State Highway stormwater management system. Slopes steeper than 1:3 shall make use of appropriate erosion matting.

Any vegetation removal in the State Highway right-of-way proposed within Stream/Riparian Buffer Zones shall conform to all Local, State, and Federal Regulatory requirements for Stream Buffer Protection. Vegetation removal in the State Highway right-of-way must be pre-approved by the District Transportation Administrator.

By acceptance of this permit, the Permit Holder agrees to defend, hold harmless and indemnify the Agency, the State of Vermont, and their officers and employees from and against all claims arising out of connections of the Permit Holder's stormwater management system to the Agency's State Highway stormwater management system.

This permit authorizes only the discharge of stormwater runoff to the Agency's stormwater management system with the following exemptions:

- water line flushing or other potable water sources,
- landscape irrigation or lawn watering,
- rising ground water,
- ground water infiltration to storm drains,
- air conditioning condensation,
- fire fighting activities.

The Permit Holder shall verify the appropriate safety measures needed, prior to construction, so proper devices and/or personnel are available when and as needed. Traffic control devices, shall be in conformance with the MUTCD (Manual on Uniform Traffic Control Devices), Agency standards and any additional traffic control deemed necessary by the District Transportation Administrator. The Permit Holder's failure to utilize proper measures shall be considered sufficient grounds for the District Transportation Administrator to order cessation of the work immediately.

The Permit Holder will perform construction in such a way as to minimize conflicts with normal highway traffic. When two-way traffic cannot be maintained, the Permit Holder shall provide a sign package that conforms to the MUTCD (Manual on Uniform Traffic Control Devices) or Agency standards, as well as trained Flaggers. The District Transportation Administrator may require a similar sign package with trained Flaggers whenever it is deemed necessary for the protection of the traveling public. In addition, the District Transportation Administrator may require the presence of Uniform Traffic Officers (UTOs); moreover, the presence of UTOs shall not excuse the Permit Holder from its obligation to provide the sign package and Flaggers.

The Permit Holder must submit a traffic control plan to the Agency's Permitting Services office for Agency approval prior to beginning work, unless otherwise approved by the Agency's District Transportation Administrator. This shall include not only traffic control for vehicular traffic but also a pedestrian detour if deemed necessary by the Agency.

The Permit Holder shall ensure that all workers exposed to the risks of moving highway traffic and/or construction equipment wear high-visibility safety apparel meeting the requirements of ISEA (International Safety Equipment Association) "American National Standards for High-Visibility Safety Apparel," and labeled as ANSI (American National Standards Institute) 107-2004, or latest revisions, for Performance Class 2 or 3 requirements. A competent person - one designated by the Permit Holder's Contractor to be responsible for worker safety within the activity area of the State highway right-of-way shall select the appropriate class of garment. The Engineer may suspend this permit until compliance is obtained.

Independence; Liability: The Permit Holder will act in an independent capacity and not as officers or employees of the State.

The Permit Holder shall defend the State and its officers and employees against all claims or suits arising in whole or in part from any act or omission of the Permit Holder or of any agent of the Permit Holder. The State shall notify the Permit Holder in the event of any such claim or suit, and the Permit Holder shall immediately retain counsel and otherwise provide a complete defense against the entire claim or suit.

After a final judgment or settlement, the Permit Holder may request recoupment of specific defense costs and may file suit in the Washington Superior Court requesting recoupment. The Permit Holder shall be entitled to recoup costs only upon a showing that such costs were entirely unrelated to the defense of any claim arising from an act or omission of the Permit Holder.

The Permit Holder shall indemnify the State and its officers and employees in the event that the State, its officers or employees become legally obligated to pay any damages or losses arising from any act or omission of the Permit Holder.

Insurance: Before beginning any work under this Permit the Permit Holder must provide certificates of insurance to show that the following minimum coverages are in effect. It is the responsibility of the Permit Holder to maintain current certificates of insurance on file with the State for the duration of work under the Permit. No warranty is made that the coverages and limits listed herein are adequate to cover and protect the interests of the Permit Holder for the Permit Holder's operations. These are solely minimums that have been established to protect the interests of the State.

Workers Compensation: With respect to all operations performed under the Permit, the Permit Holder shall carry workers compensation insurance in accordance with the laws of the State of Vermont.

General Liability and Property Damage: With respect to all operations performed under the Permit, the Permit Holder shall carry general liability insurance having all major divisions of coverage including, but not limited to:

Premises - Operations
Products and Completed Operations
Personal Injury Liability
Contractual Liability

The policy shall be on an occurrence form and limits shall not be less than:

$2,000,000 Per Occurrence
$2,000,000 General Aggregate
$2,000,000 Products/Completed Operations Aggregate
$ 50,000 Fire/Legal Liability

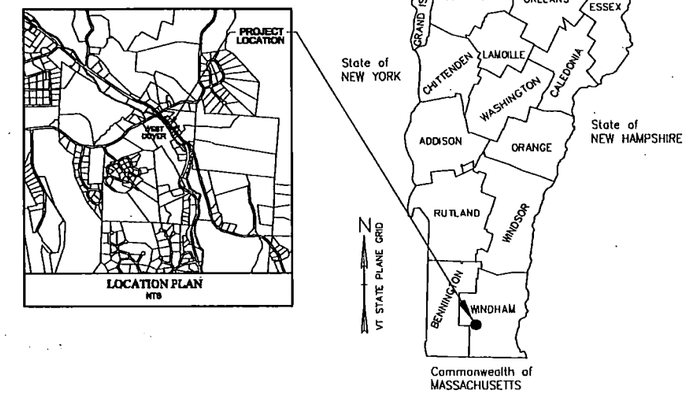
Permit Holder shall name the State of Vermont and its officers and employees as additional insureds for liability arising out of this Permit.

Automotive Liability: The Permit Holder shall carry automotive liability insurance covering all motor vehicles, including hired and non-owned coverage, used in connection with the Permit. Limits of coverage shall not be less than: $1,000,000 combined single limit.

Permit Holder shall name the State of Vermont and its officers and employees as additional insureds for liability arising out of this Permit.

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
DOVER STP EH12 (3)

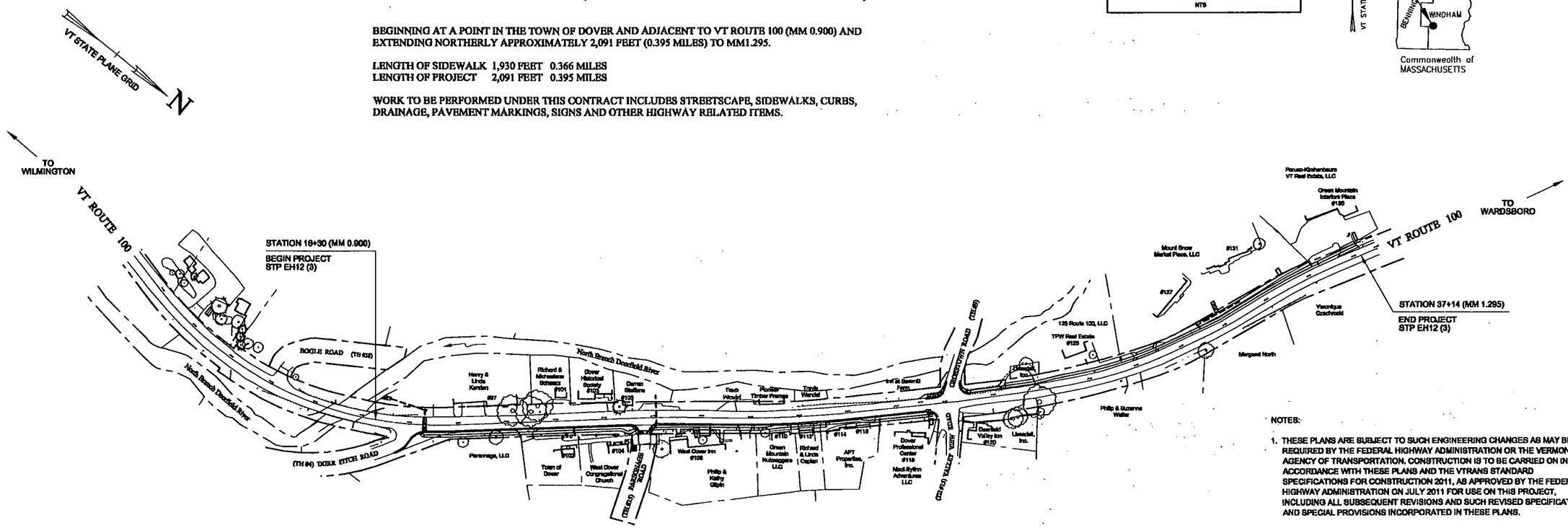
COUNTY OF WINDHAM
VT ROUTE 100 (MINOR ARTERIAL)



BEGINNING AT A POINT IN THE TOWN OF DOVER AND ADJACENT TO VT ROUTE 100 (MM 0.900) AND EXTENDING NORTHERLY APPROXIMATELY 2,091 FEET (0.395 MILES) TO MM1.295.

LENGTH OF SIDEWALK 1,930 FEET 0.366 MILES
LENGTH OF PROJECT 2,091 FEET 0.395 MILES

WORK TO BE PERFORMED UNDER THIS CONTRACT INCLUDES STREETSCAPE, SIDEWALKS, CURBS, DRAINAGE, PAVEMENT MARKINGS, SIGNS AND OTHER HIGHWAY RELATED ITEMS.



OVERALL SITE PLAN
1" = 100'

NOTES:

1. THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE VERMONT AGENCY OF TRANSPORTATION. CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS INCORPORATED IN THESE PLANS.
2. VT. ROUTE 100 SIDELINES ARE BASED ON LIMITED FOUND EXISTING BOUNDARY EVIDENCE AND VTRANS RIGHT-OF-WAY PLANS DATED OCTOBER 1964. INDIVIDUAL PROPERTY LINES WERE LOCATED BASED ON FOUND EVIDENCE, THE ABOVE VTRANS PLANS AND TOWN PARCEL MAPPING.
3. LINES SHOWN ON THESE PLANS AS EXISTING PROPERTY LINES ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE TOWN OF DOVER'S ACQUISITION OF LANDS AND RIGHTS FOR THIS PROJECT.
4. TRAFFIC DATA (ROUTE 100)
   2012 AADT = 4,900 VPD
   2032 AADT = 5,200 VPD
   2032 DHV = 950 VPH
   2032 %T = 8.4%
   DESIGN SPEED = 35 MPH
   20 YR 18 KIP ESAL'S = N/A

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Mann Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

QUALITY ASSURANCE PROGRAM: INSPECTION LEVEL 3
DATUM VERTICAL NAVD 88 HORIZONTAL NAD 83(1996)

FUNDING ASSISTANCE FOR THIS PROJECT IS BEING PROVIDED BY THE TOWN OF DOVER, VTRANS AND FHWA

FINAL PLANS
APRIL 27, 2015

TOWN OF DOVER
ACCEPTED _____ DATE _____

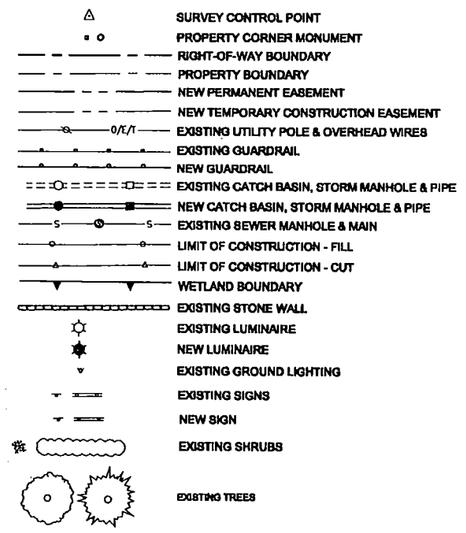
PROJ. NAME: DOVER VALLEY TRAIL SEGMENT A SIDEWALK
PROJ. NUMBER: DOVER STP EH12 (3)

INDEX OF SHEETS

VAOT STANDARD DETAILS

DETAIL #	TITLE	DATE
B-5	SLOPE GRADING, EMBANKMENT ON EARTH SLOPE	6-01-94
B-71	RESIDENTIAL AND COMMERCIAL DRIVES	7-08-05
C-2A	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES	10-14-05
C-2B	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES	10-14-05
C-3A	SIDEWALK RAMPS	3-10-08
C-3B	SIDEWALK RAMPS AND MEDIAN ISLANDS	3-10-08
C-10	CURBING	2-11-08
D-3	TREATED GUTTERS	6-01-94
D-4	CORRUGATED PIPE END SECTION	8-13-07
D-9	REINFORCED CONCRETE DROP INLET WITH VERTICAL CURB	6-01-94
D-20	HIGHWAY CROSSING FOR UNDERGROUND UTILITIES	3-03-03
E-107A	BREAKAWAY BARRICADE DETAILS	6-08-09
E-121	STANDARD SIGN PLACEMENT, CONVENTIONAL ROAD	8-08-95
E-143	REGULATORY SIGN DETAILS	6-15-04
E-143B	REGULATORY SIGN DETAILS	3-15-05
E-146	REGULATORY SIGN DETAILS	9-20-95
E-150	WARNING SIGN DETAILS	6-15-04
E-152	WARNING SIGN DETAILS	6-15-04
E-153B	WARNING SIGN DETAILS	6-15-04
E-191	PAVEMENT MARKING DETAILS	2-01-99
E-192	PAVEMENT MARKING DETAILS	10-12-00
E-193	PAVEMENT MARKING DETAILS	8-18-95
G-1D	STEEL BEAM GUARDRAIL APPROACH END TERMINAL & TRAILING END TERMINAL	1-03-00
T-1	TRAFFIC CONTROL GENERAL NOTES	8-06-12
T-10	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING	8-06-12
T-30	CONSTRUCTION SIGN DETAILS	8-06-12
T-35	CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS	8-06-12
T-45	SQUARE TUBE SIGN POST AND ANCHOR	1-02-13

Legend



FINAL PLANS
APRIL 20, 2015

INDEX SHEET	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com LAD PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 2

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES		TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
ROADWAY	STREET LIGHTING	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
1		1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.11				
690		690		CY	COMMON EXCAVATION	203.15				
136		136		CY	EXCAVATION OF SURFACES AND PAVEMENTS	203.28				
115		115		CY	EARTH BORROW	203.30				
10		10		CY	GRANULAR BORROW	203.32				
590		590		CY	TRENCH EXCAVATION OF EARTH	204.20				
6		6		CY	TRENCH EXCAVATION OF ROCK	204.21				
150		150		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10				
400		400		CY	SUBBASE OF CRUSHED GRAVEL, COARSE GRADED	301.25				
2		2		CWT	EMULSIFIED ASPHALT	404.65				
108		108		TON	BITUMINOUS CONCRETE PAVEMENT	406.25				
50		50		GAL	WATER REPELLENT, SILANE	514.10				
100		100		LF	15" CPEP	601.0910				
215		215		LF	18" CPEP	601.0915				
1		1		EACH	18" CPEPES	601.7015				
12		12		EACH	PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE	604.20				
2		2		EACH	CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES	604.40				
3		3		EACH	REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS I	604.412				
1		1		MGAL	DUST CONTROL WITH WATER	609.10				
4		4		CY	RIPRAP, LIGHT TYPE	613.16				
1270		1270		LF	VERTICAL GRANITE CURB	616.21				
940		940		SY	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	618.10				
130		130		SY	PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH	618.11				
56		56		SF	DETECTABLE WARNING SURFACE	618.30				
90		90		LF	STEEL BEAM GUARDRAIL, GALVANIZED	621.20				
1		1		EACH	MANUFACTURED TERMINAL SECTION, TANGENT	621.51				
1		1		EACH	GUARDRAIL APPROACH SECTION, GALVANIZED TYPE I	621.70				
65		65		LF	REMOVE AND RESET GUARDRAIL	621.75				
95		95		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80				
40		40		HR	UNIFORMED TRAFFIC OFFICERS	630.10				
1200		1200		HR	FLAGGERS	630.15				
1		1		LS	MOBILIZATION/DEMOBILIZATION	635.11				
1		1		LS	TRAFFIC CONTROL	641.10				
1400		1400		LF	DURABLE 4 INCH WHITE LINE	646.400				
180		180		LF	DURABLE 4 INCH YELLOW LINE	646.410				
50		50		LF	DURABLE 24 INCH STOP BAR	646.480				
100		100		LF	DURABLE CROSSWALK MARKING	646.500				
110		160		SY	GEOTEXTILE FOR SILT FENCE	649.51				
130		160		SY	GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED	649.515				
100		100		LB	SEED	651.15				

PROJECT NAME: Dover Valley Trail Segment A Sidewalk
PROJECT NUMBER: DOVER STP EH12(3)

FILE NAME: 12040Final Quantity Sheet
PROJECT LEADER: RD
DESIGNED BY: RD
QUANTITY SHEET #1

PLOT DATE: 04/27/2015
DRAWN BY: WH
CHECKED: AR
SHEET 2 OF 35

STATE OF VERMONT
AGENCY OF TRANSPORTATION

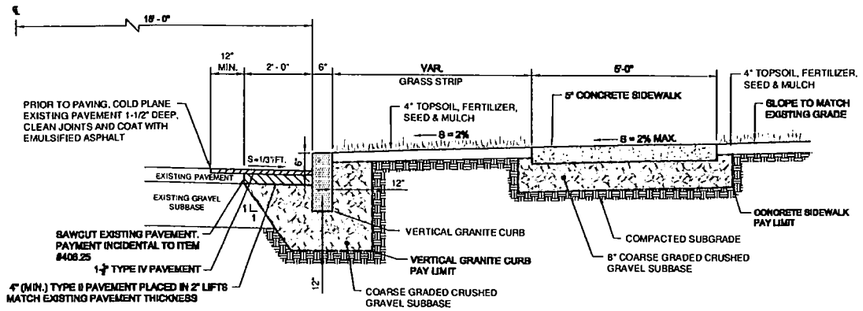
QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES		TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
ROADWAY	STREET LIGHTING	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
0.5		0.5		TON	HAY MULCH	651.25				
230		230		CY	TOPSOIL	651.35				
100		100		SY	TEMPORARY EROSION MATTING	653.20				
13		13		EACH	INLET PROTECTION DEVICE, TYPE II	653.41				
1050		1050		LF	PROJECT DEMARCATION FENCE	653.55				
42		42		SF	TRAFFIC SIGNS, TYPE A	675.20				
180		180		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341				
6		6		EACH	REMOVING SIGNS	675.50				
6		6		EACH	ERECTING SALVAGED SIGNS	675.60				
	1950	1950		LF	WIRED CONDUIT (1.5 INCH)	678.23				
	60	60		LF	WIRED CONDUIT (3 INCH)	678.23				
	3	3		EACH	JUNCTION BOX	678.26				
	110	110		LF	ELECTRICAL CONDUIT SLEEVE	678.30				
	1	1		EACH	SPECIAL PROVISION (POWER STANCHION)	900.620				
	21	21		EACH	SPECIAL PROVISION (STREET LIGHT)	900.620				
62		62		TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, HAND PLACED, PG 58-28)	900.680				

PROJECT NAME Dover Valley Trail Segment A Sidewalk
PROJECT NUMBER DOVER STP EH12(3)

FILE NAME 12049Final Quanity Sheet
PROJECT LEADER RD
DESIGNED BY RD
QUANTITY SHEET #2

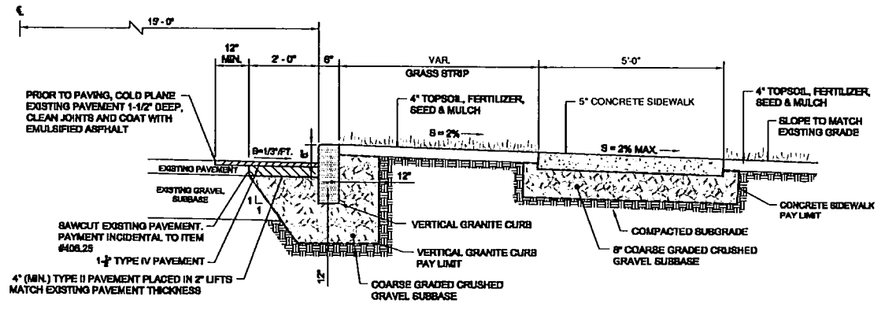
PLOT DATE 04/27/2015
DRAWN BY WH
CHECKED AR
SHEET 3 OF 35



SIDEWALK & CURB WITH GRASS STRIP SLOPED TOWARDS ROAD

NTS

Sta 19+56 to Sta 21+51 RT
Sta 21+64 to Sta 23+76 RT
Sta 24+00 to Sta 24+43 RT
Sta 26+27 to Sta 27+71 RT

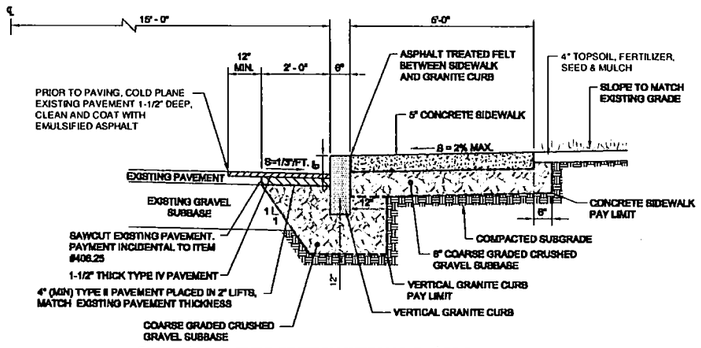


SIDEWALK & CURB WITH GRASS STRIP SLOPED AWAY FROM ROAD

NTS

CURB ONLY: Sta 18+78 to Sta 17+23 RT

CURB & SIDEWALK: Sta 17+23 to Sta 19+25 RT



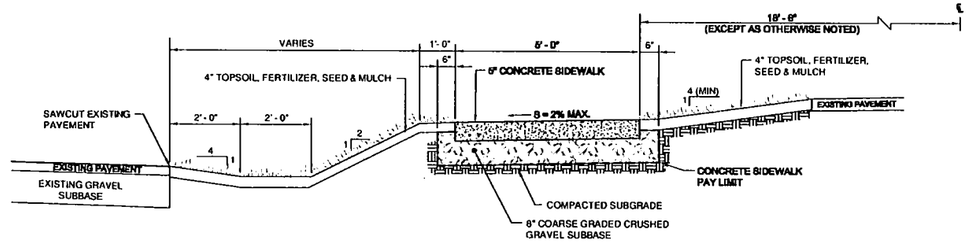
SIDEWALK & CURB SECTION WITH NO GRASS STRIP

NTS

Sta 21+51 to Sta 21+68 RT
Sta 24+43 to Sta 24+82 RT
Sta 25+53 to Sta 26+27 RT

BITUMINOUS CONCRETE PAVEMENT NOTES

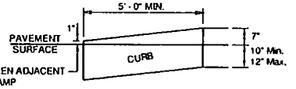
1. THE CONTRACTOR SHALL APPLY EMULSION TO THE FULL WIDTH OF THE BASE COURSE/EXISTING PAVEMENT BEFORE INSTALLING THE TYPE III PAVEMENT OVERLAY. EMULSION SHALL ALSO BE PLACED ON THE FACE OF THE CURB, THE EDGES OF EXISTING PAVEMENT AND THE EDGES OF NEW SIDEWALKS WHERE IT WILL BE IN CONTACT WITH THE PAVEMENT. EMULSIFIED ASPHALT TO BE APPLIED AT THE RATE OF 0.015 GAL./SQ YD.
2. BITUMINOUS CONCRETE PAVEMENT TOLERANCE = 1/4" (FOR TOTAL THICKNESS OF BINDER AND/OR WEARING COURSE).
3. BITUMINOUS CONCRETE PAVEMENT SHALL BE 76 BLOW MARSHALL MIX AND PERFORMANCE GRADED BINDER SHALL BE PG 58-34.



SIDEWALK WITH GRASS STRIP

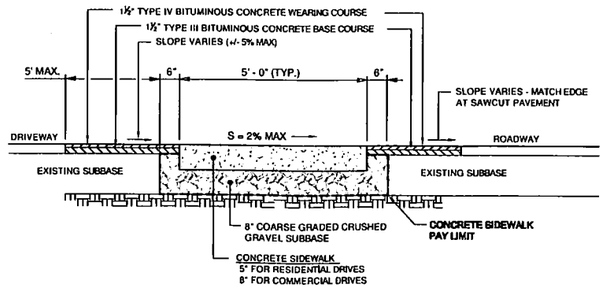
NTS

Sta 32+48 to Sta 38+10 LT



VERTICAL GRANITE CURB END SECTION

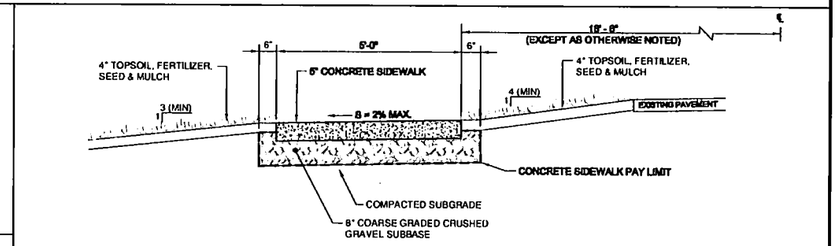
NTS



CONCRETE SIDEWALK ACROSS DRIVEWAYS

NTS

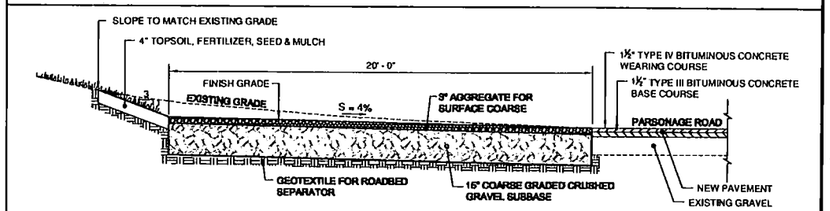
Sta 19+25 to Sta 19+56 RT
Sta 23+76 to Sta 24+00 RT
Sta 24+82 to Sta 24+97 RT
Sta 25+28 to Sta 25+53 RT
Sta 29+26 to Sta 29+87 LT
Sta 32+19 to Sta 32+46 LT
Sta 36+79 to Sta 37+12 LT



SIDEWALK WITH GRASS STRIP

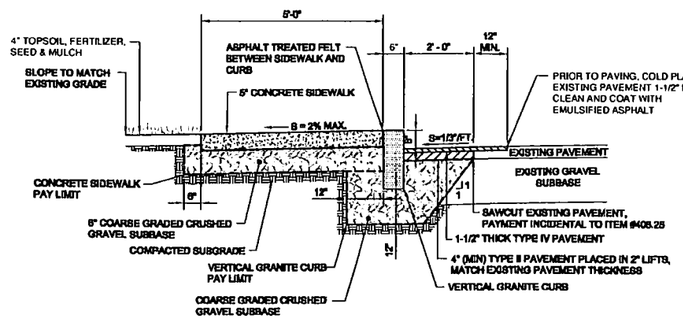
NTS

Sta 29+87 to Sta 32+19 LT
Sta 36+10 to Sta 36+79 LT



PARSONAGE ROAD GRAVEL PARKING

NTS



SIDEWALK & CURB SECTION WITH NO GRASS STRIP

NTS

Sta 27+68 to Sta 27+85 LT (NO REVEAL)
Sta 28+40 to Sta 29+26 LT

FINAL PLANS
APRIL 20, 2015

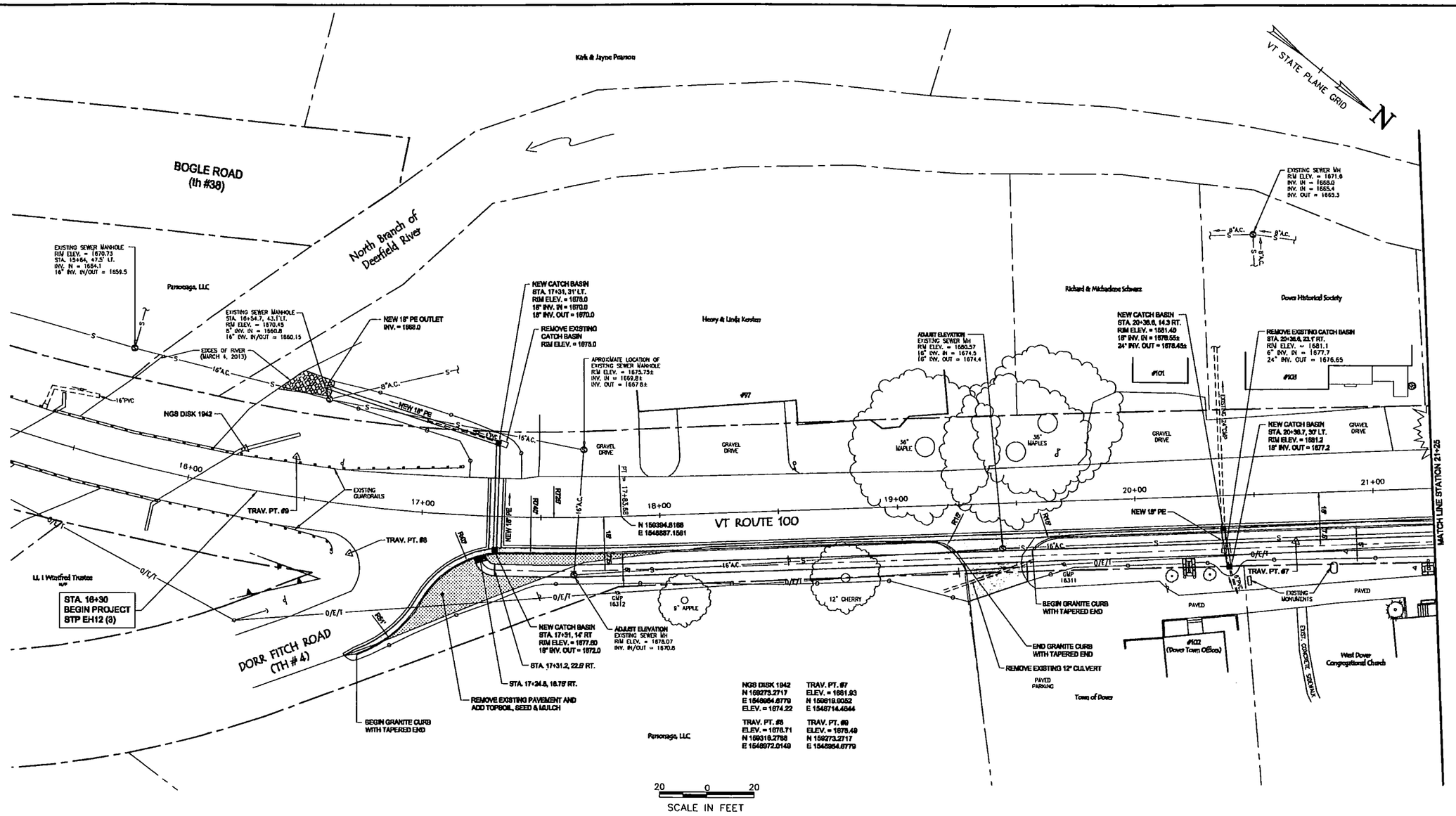
TYPICAL CROSS SECTIONS

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
DOVER STP EH12 (3)

Lamoureux & Dickinson Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

L&D PROJECT NO.: 12049
DRAWN BY: BH
CHECKED BY: RD

SHEET: 5



ITEM 203.28 - EXCAVATION OF SURFACES AND PAVEMENTS
STA 18+69 - 18+04 RT
STA 19+14 - 19+87 RT

ITEM 616.21 - VERTICAL GRANITE CURB
STA 18+70 - 18+24 RT
STA 19+58 - 21+25 RT

ITEM 618.10 - PORTLAND CEMENT CONCRETE SIDEWALK, 6 INCH
STA 17+23 - 19+26 RT
STA 19+58 - 21+28 RT

ITEM 618.11 - PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH
STA 19+26 - 19+58 RT

ITEM 618.30 - DETECTABLE WARNING SURFACE
STA 17+28 RT

ITEM 604.40 - CHANGING ELEVATION OF DROP INLETS, CATCH BASINS OR MANHOLES
STA 17+63 RT
STA 19+34 RT

REMOVE EXISTING CATCH BASIN ITEM 204.21 - TRENCH EXCAVATION OF ROCK
STA 17+23 LT
STA 20+37 RT

FINAL PLANS
APRIL 27, 2015

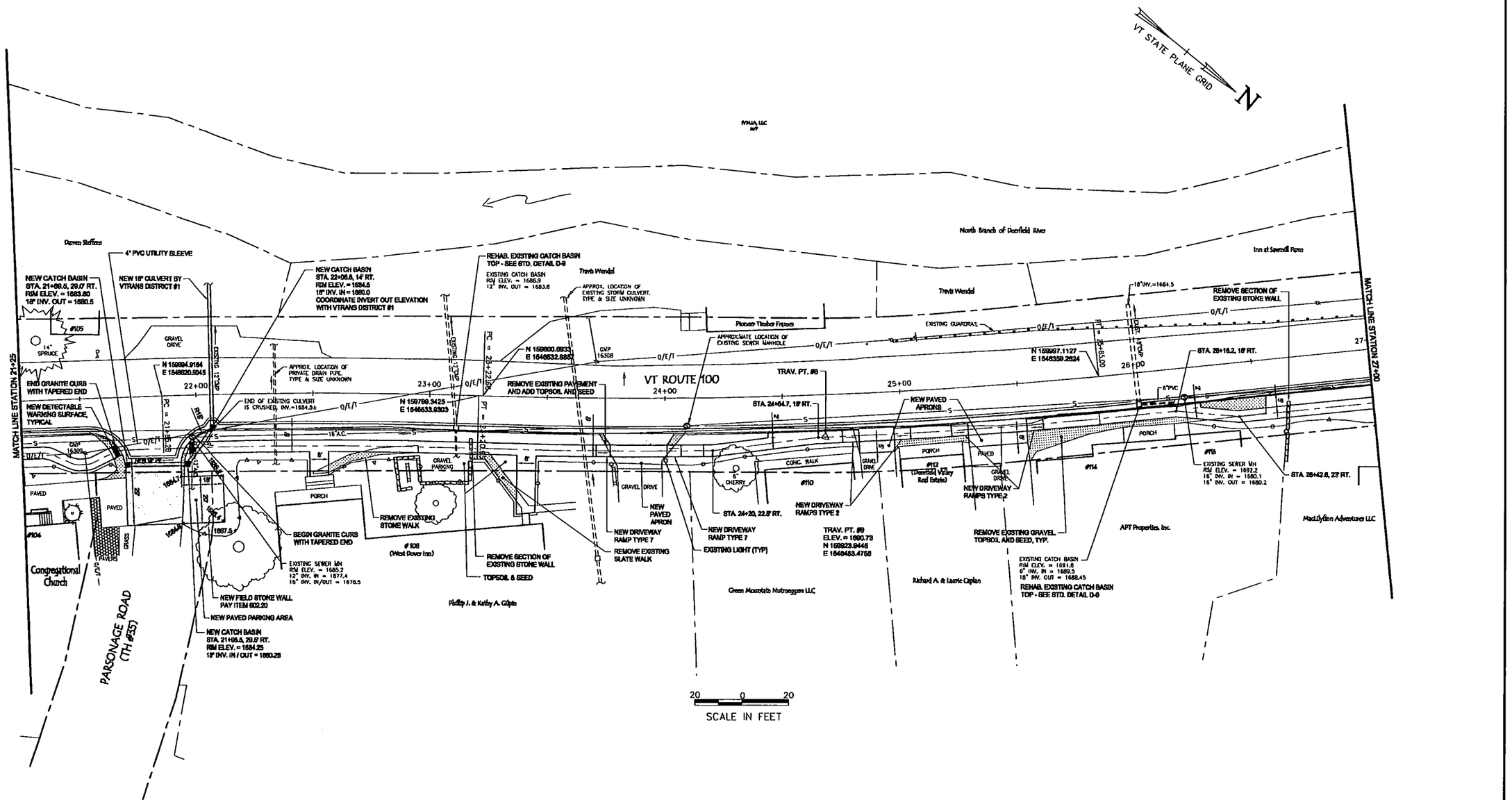
LAYOUT PLAN

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
DOVER STP EH12 (3)

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

L&D PROJECT NO.: 12049
DRAWN BY: BH
CHECKED BY: RD

SHEET: 6



ITEM 203.28 - EXCAVATION OF SURFACES AND PAVEMENTS
STA 21+68 - 21+68 RT
STA 21+93 - 21+95 RT
STA 22+57 - 22+95 RT
STA 23+18 - 23+38 RT
STA 23+72 - 23+77 RT
STA 24+01 - 24+08 RT
STA 24+97 - 25+28 RT
STA 25+53 - 25+55 RT

ITEM 616.21 - VERTICAL GRANITE CURB
STA 21+25 - 21+64 RT
STA 21+98 - 27+00 RT

ITEM 618.10 - PORTLAND CEMENT CONCRETE SIDEWALK, 6 INCH
STA 21+25 - 21+68 RT
STA 21+93 - 23+76 RT
STA 24+01 - 24+61 RT
STA 24+98 - 25+27 RT
STA 25+62 - 27+00 RT

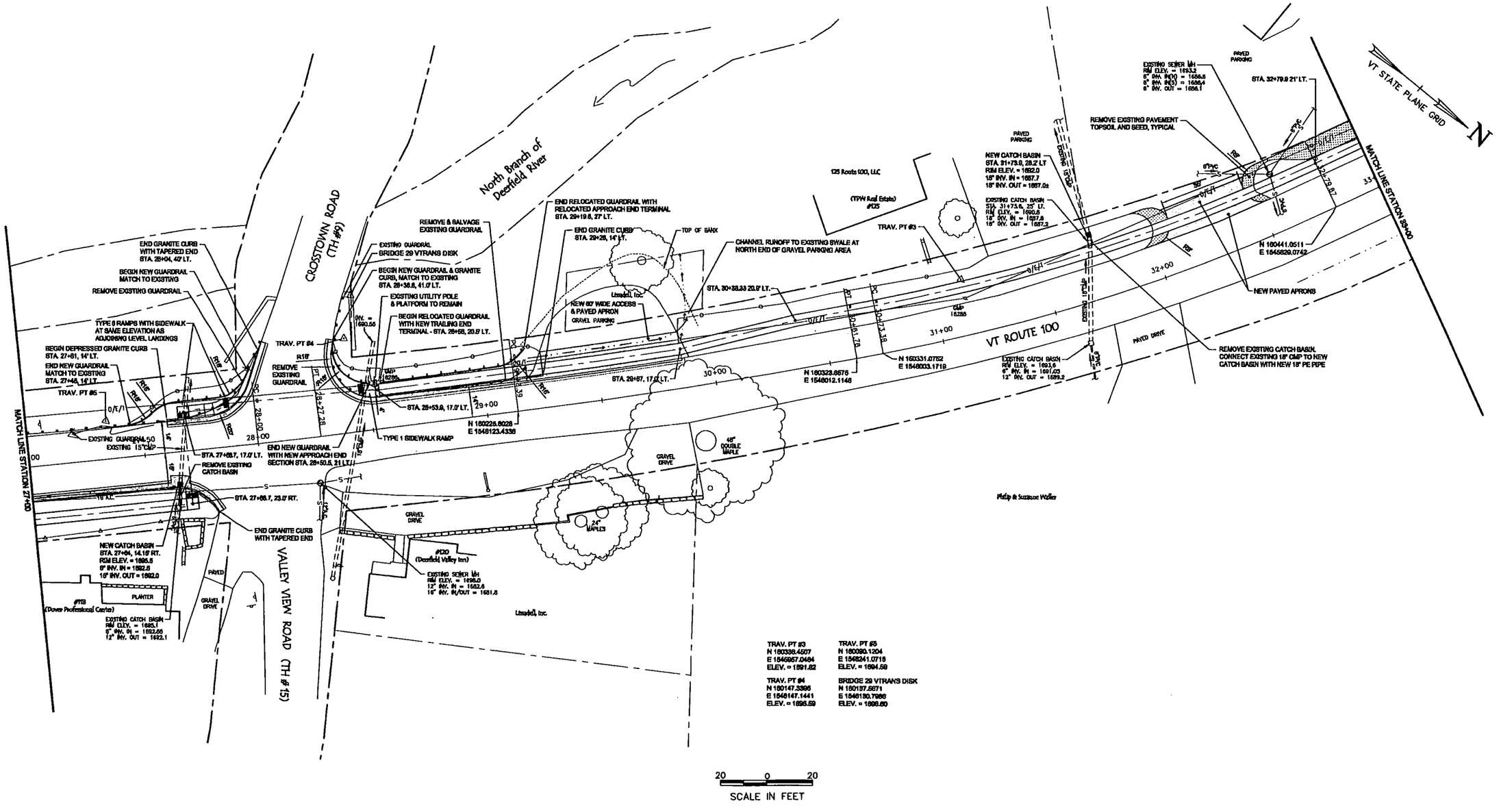
ITEM 618.11 - PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH
STA 23+76 - 24+01 RT
STA 24+61 - 24+98 RT
STA 25+27 - 25+62 RT

ITEM 618.30 - DETECTABLE WARNING SURFACE
STA 21+64 RT
STA 21+98 RT

ITEM 604.412 - REHAB. DROP INLETS, CATCH BASINS OR MANHOLES, CLASS I
STA 23+12 RT
STA 25+01 RT

FINAL PLANS
APRIL 20, 2015

LAYOUT PLAN	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	SHEET: 7
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Manor Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com	LAD PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD



ITEM 203.25 - EXCAVATION OF SURFACES AND PAVEMENTS
STA 31+95 - 32+10 LT
STA 32+48 - 33+00 LT

ITEM 616.21 - VERTICAL GRANITE CURB
STA 27+00 - 27+80 RT
STA 27+61 - 28+04 LT
STA 29+36 - 30+00 LT

ITEM 616.10 - PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
STA 27+00 - 27+71 RT
STA 27+85 - 27+94 LT
STA 29+41 - 29+27 LT
STA 29+86 - 32+09 LT
STA 32+48 - 33+00 LT

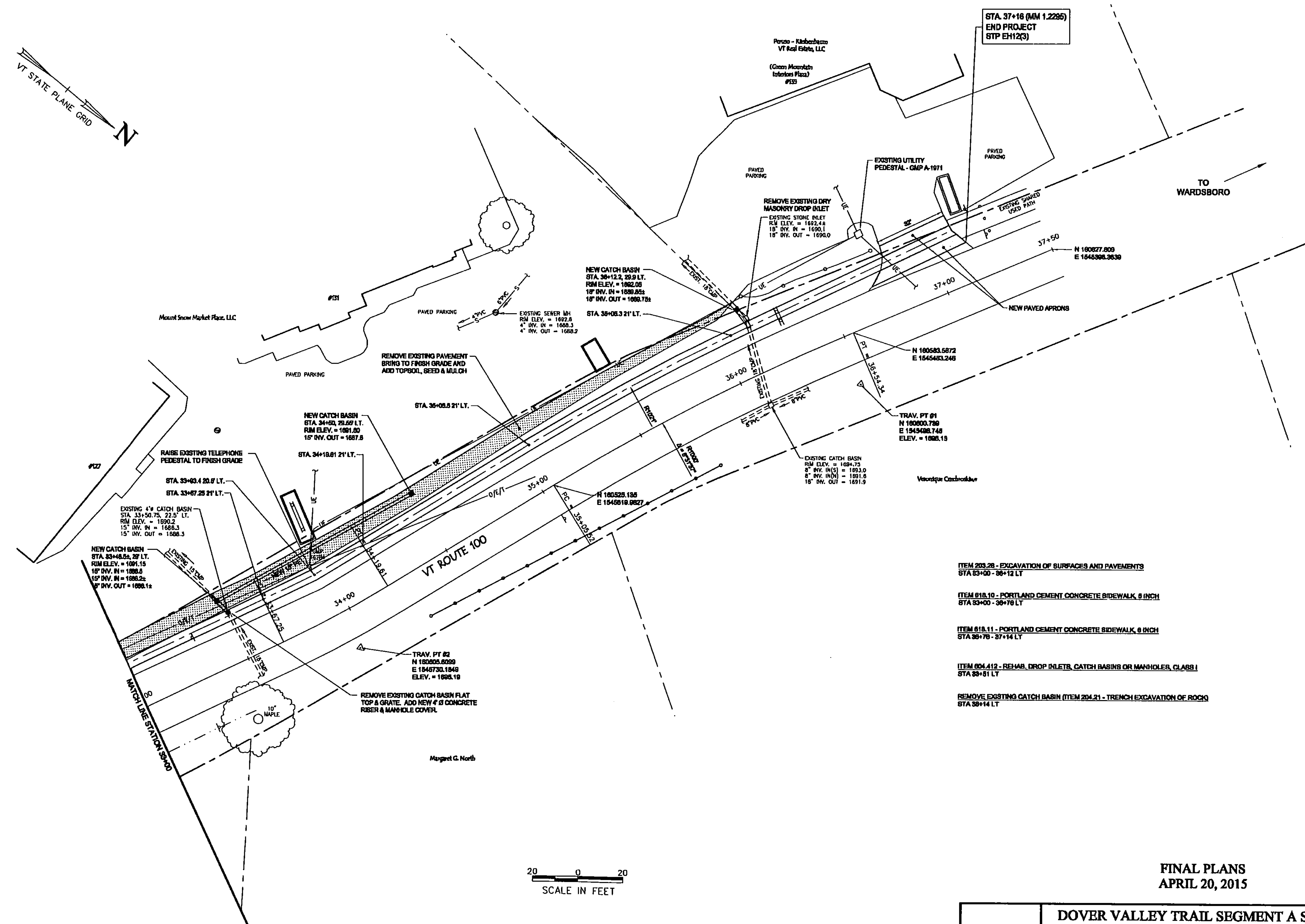
ITEM 616.11 - PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH
STA 29+27 - 29+86 LT
STA 32+09 - 32+48 LT

ITEM 616.30 - DETECTABLE WARNING SURFACE
STA 27+69 RT
STA 27+69 LT
STA 29+47 LT

REMOVE EXISTING CATCH BASIN (ITEM 204.21 - TRENCH EXCAVATION OF ROCK)
STA 27+63 RT
STA 31+74 LT

FINAL PLANS
APRIL 27, 2015

LAYOUT PLAN	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4435 www.LDengineering.com	LD PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD
		SHEET: 8



ITEM 203.28 - EXCAVATION OF SURFACES AND PAVEMENTS
STA 33+00 - 36+12 LT

ITEM 618.10 - PORTLAND CEMENT CONCRETE SIDEWALK, 6 INCH
STA 33+00 - 36+76 LT

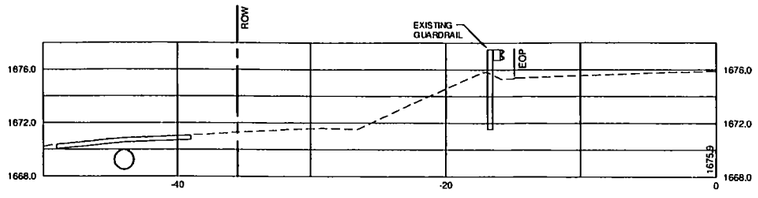
ITEM 618.11 - PORTLAND CEMENT CONCRETE SIDEWALK, 6 INCH
STA 36+76 - 37+14 LT

ITEM 604.412 - REHAB. DROP INLETS, CATCH BASINS OR MANHOLES, CLASS I
STA 33+51 LT

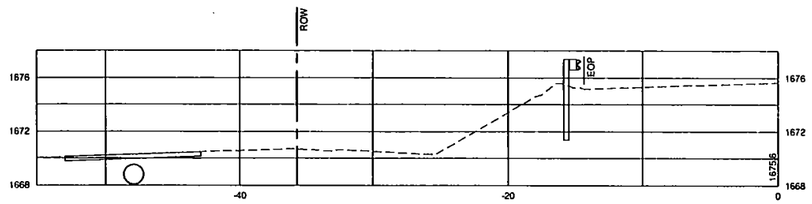
REMOVE EXISTING CATCH BASIN (ITEM 204.21 - TRENCH EXCAVATION OF ROCK)
STA 36+14 LT

FINAL PLANS
APRIL 20, 2015

LAYOUT PLAN	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 9



16+75



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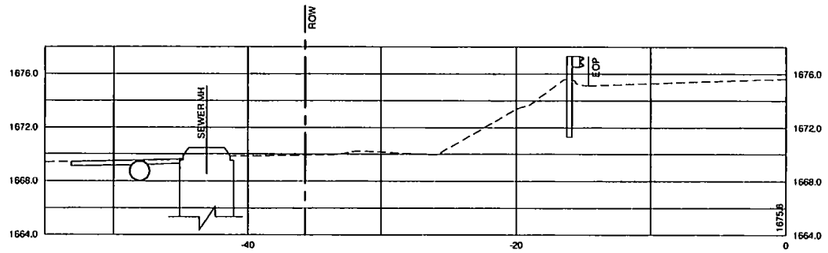
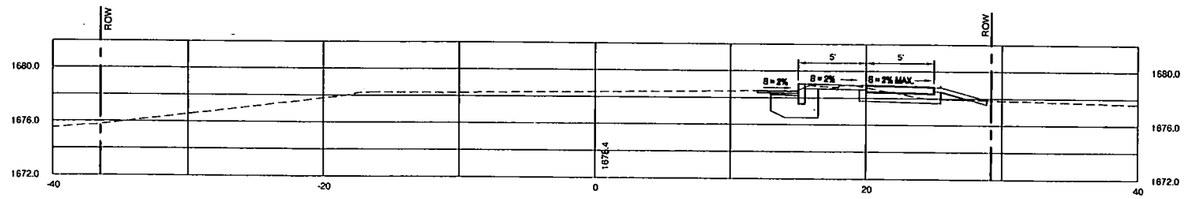
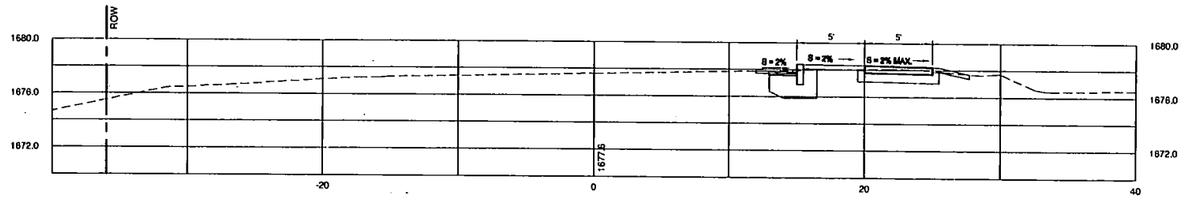


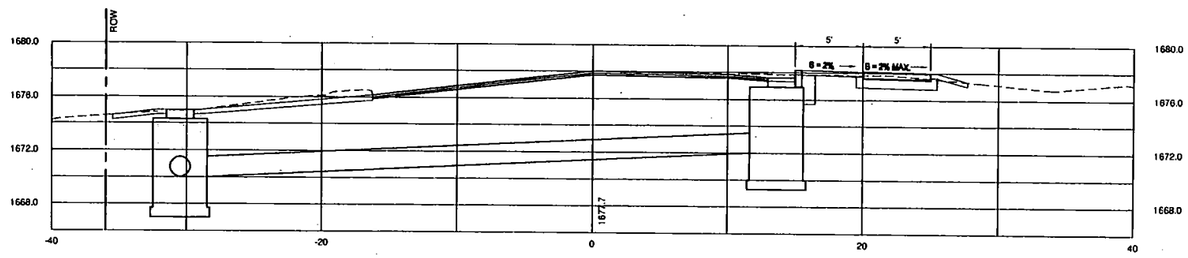
16+55



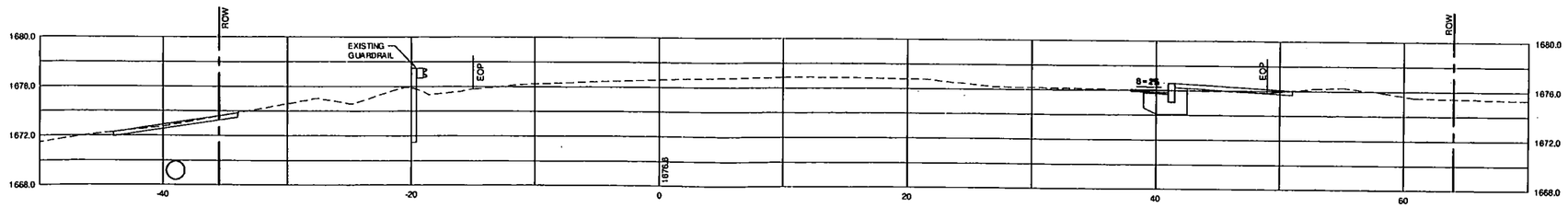
18+00



17+50



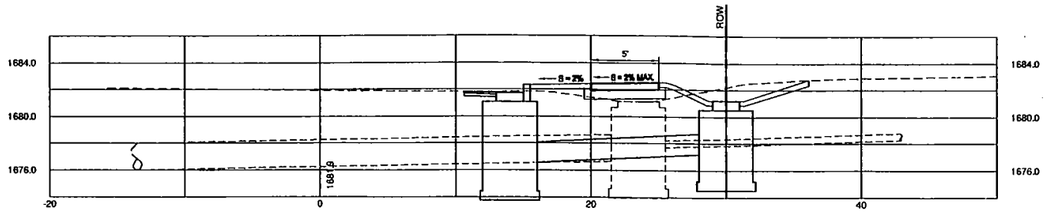
17+31



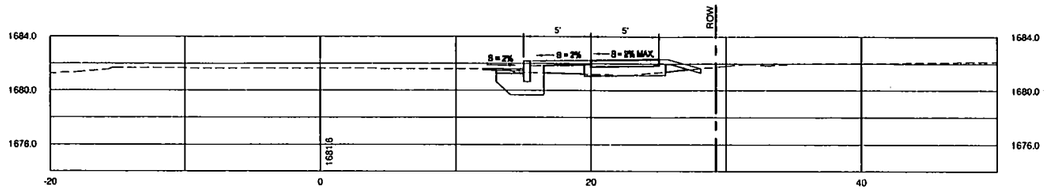
17+00

FINAL PLANS
APRIL 20, 2015

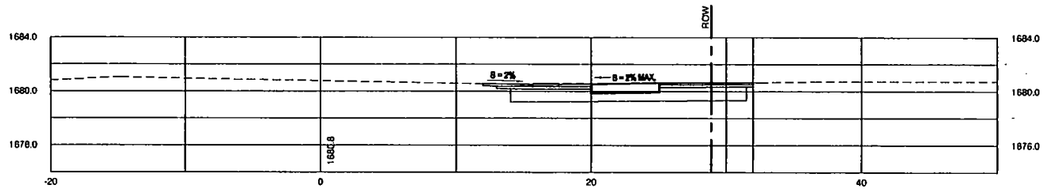
CROSS SECTIONS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 10



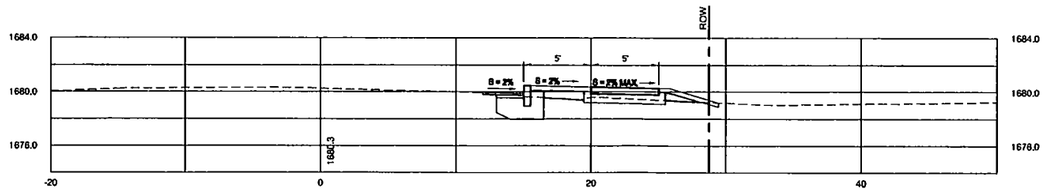
20+36.50



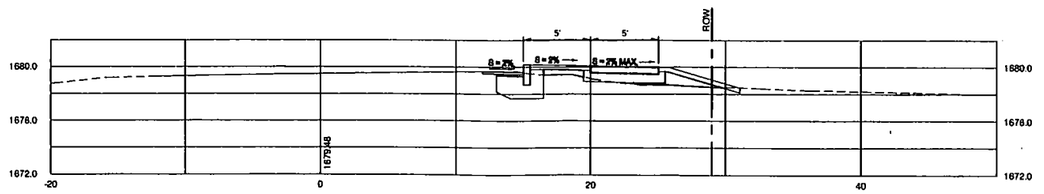
20+00



19+50



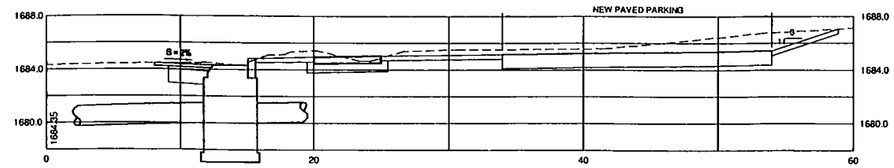
19+00



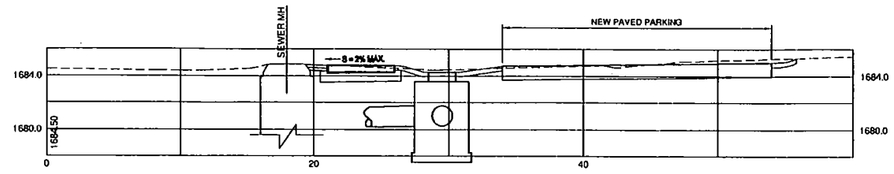
18+50

FINAL PLANS
APRIL 20, 2015

CROSS SECTIONS	**DOVER VALLEY TRAIL SEGMENT A SIDEWALK** **DOVER STP BH12 (3)**	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 11



22+06.80



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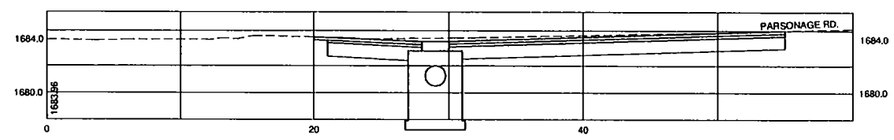
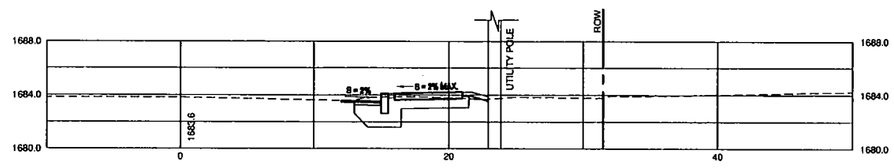
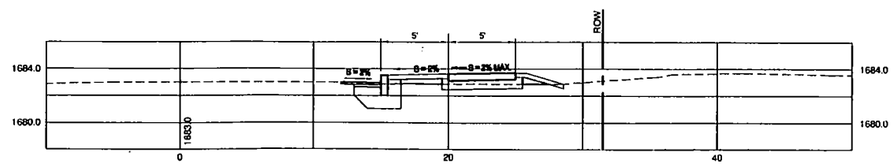


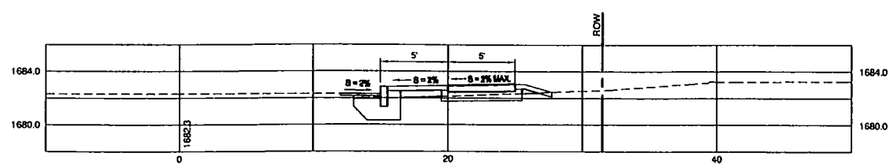
21+69.50



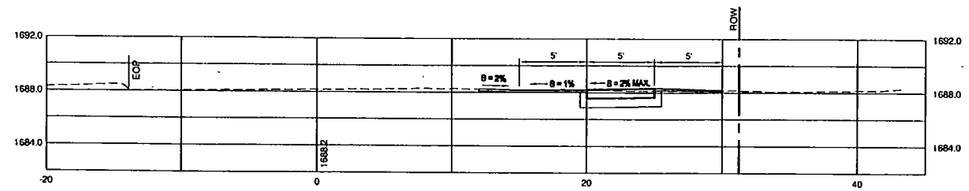
21+50



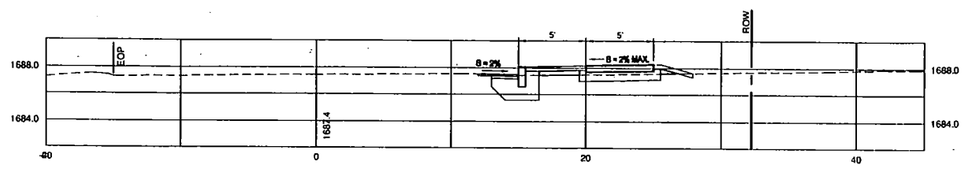
21+00



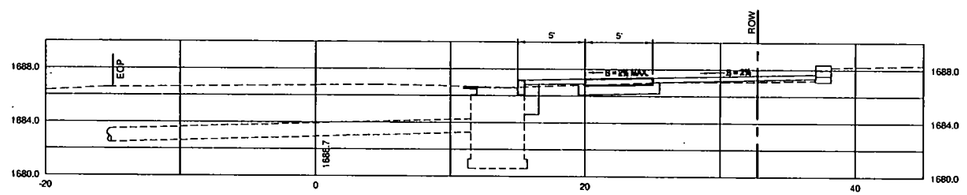
20+50



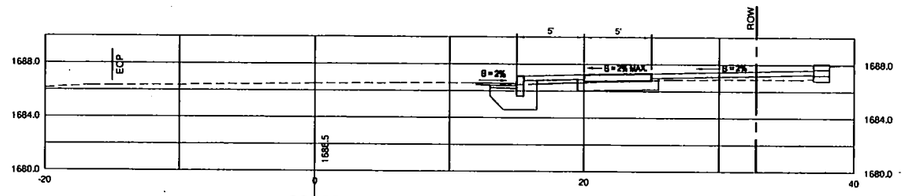
23+90



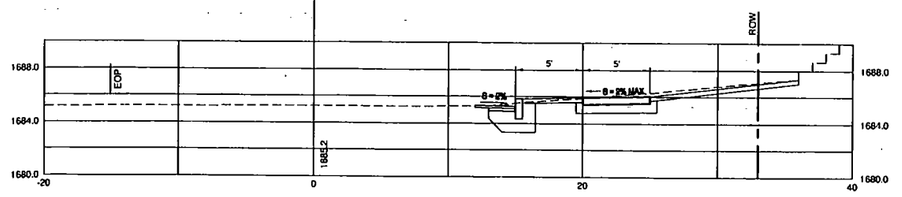
23+50



23+11.50



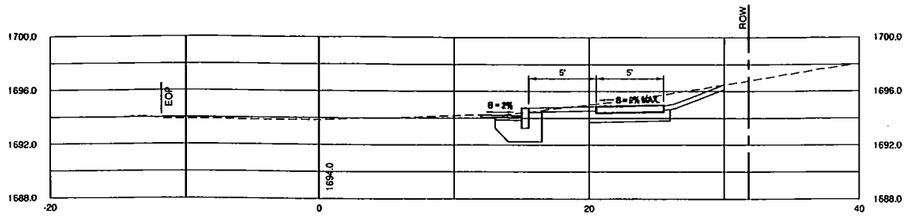
23+00



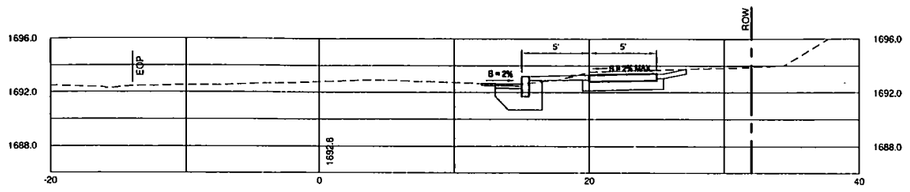
22+50

FINAL PLANS
APRIL 20, 2015

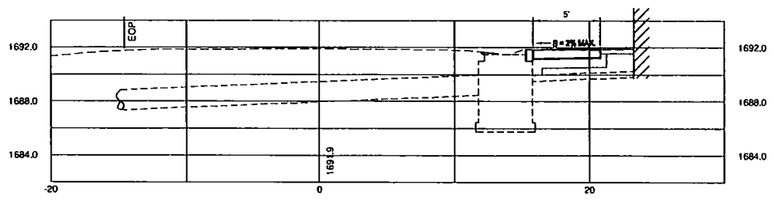
CROSS SECTIONS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 12



27+00



26+50



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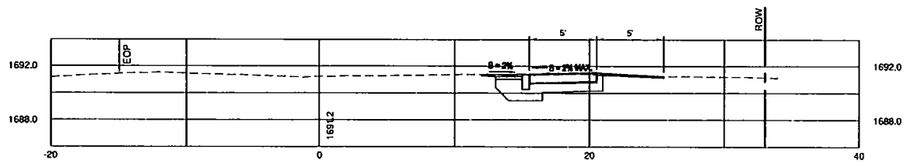
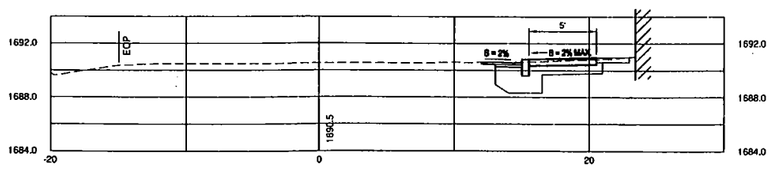
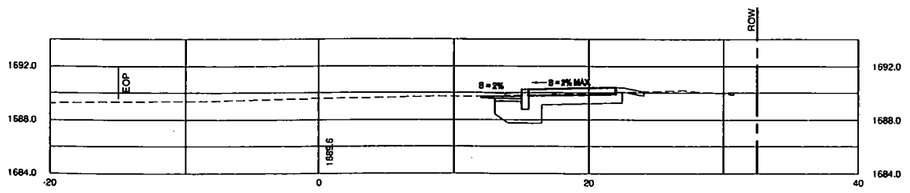


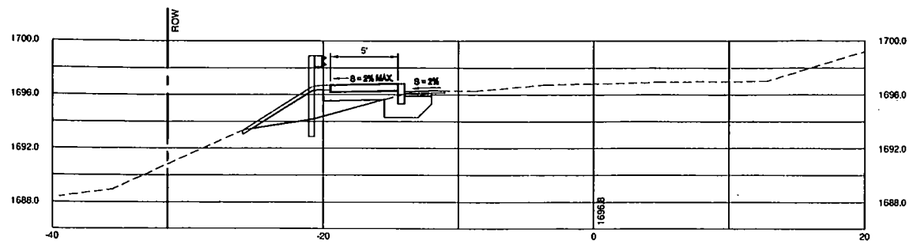
25+50



25+00



24+50



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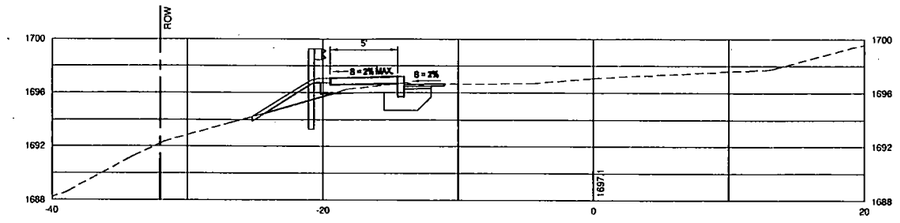

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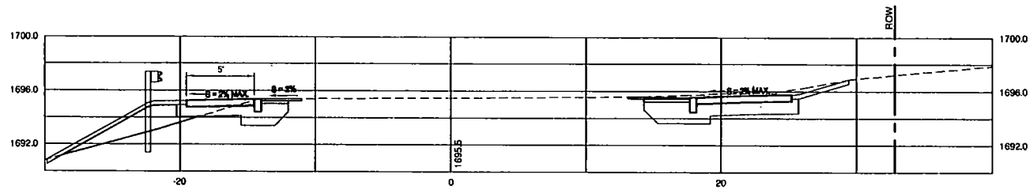

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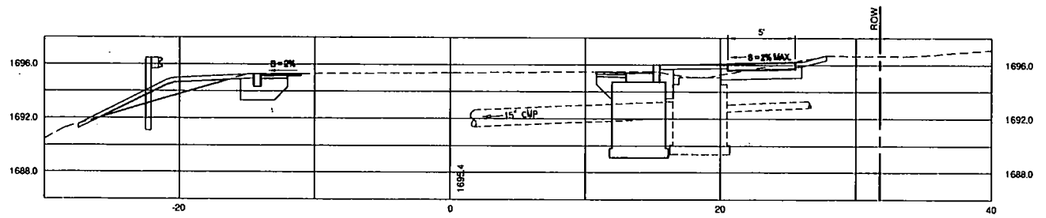

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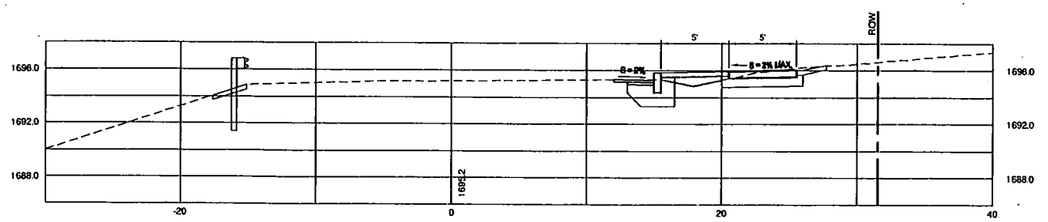

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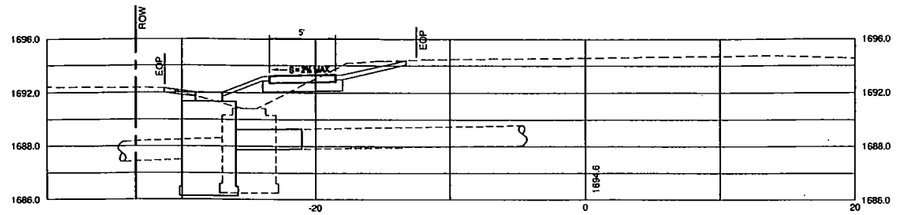
FINAL PLANS
APRIL 20, 2015

CROSS SECTIONS	**DOVER VALLEY TRAIL SEGMENT A SIDEWALK** **DOVER STP BH12 (3)**	SHEET: 13
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com	L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD



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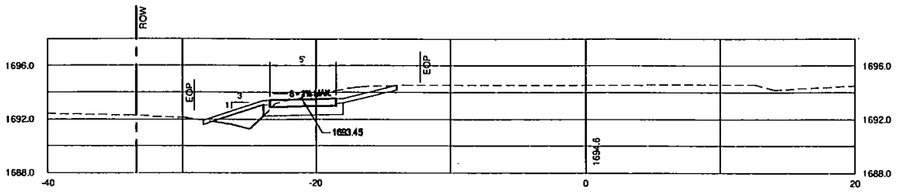

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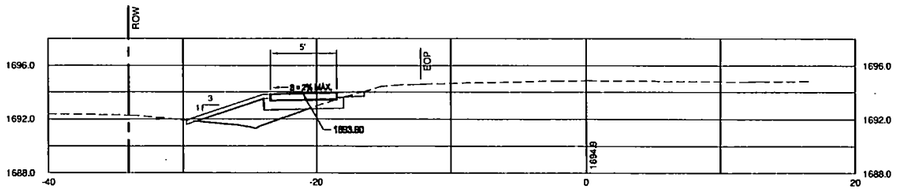

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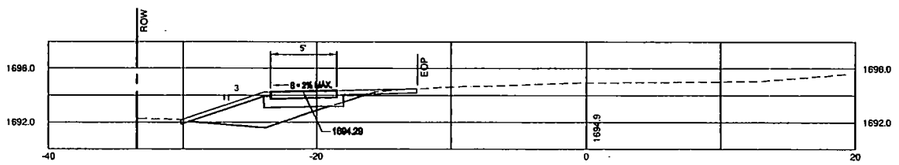

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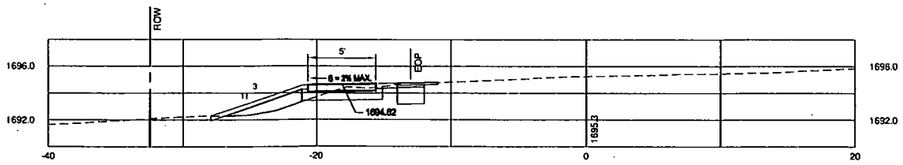

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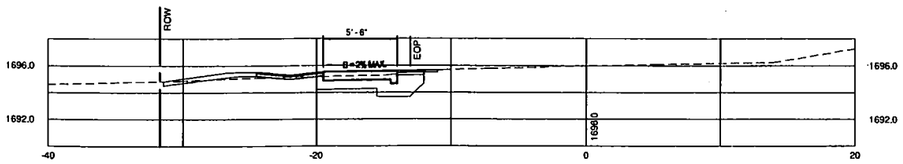

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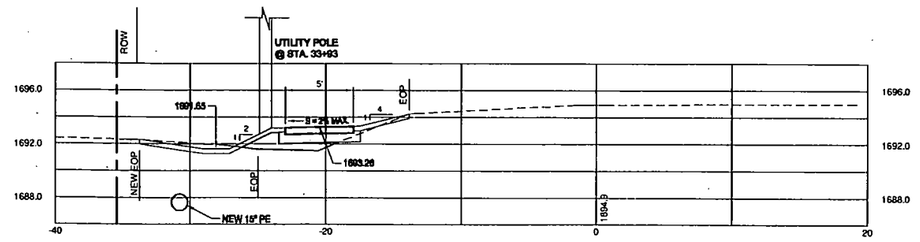

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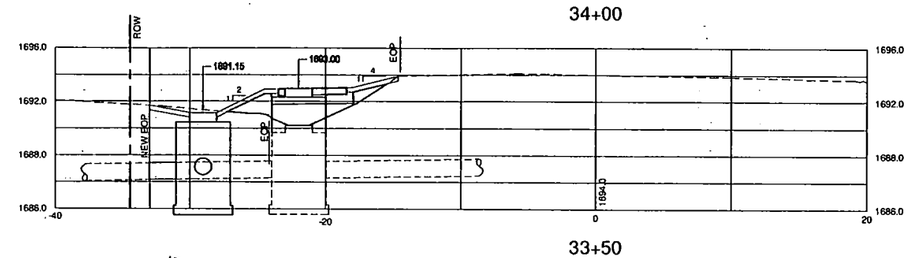

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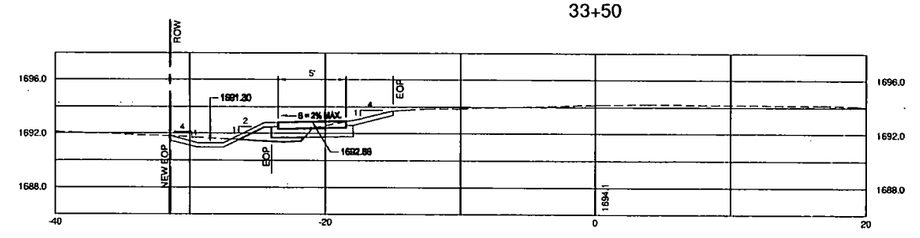

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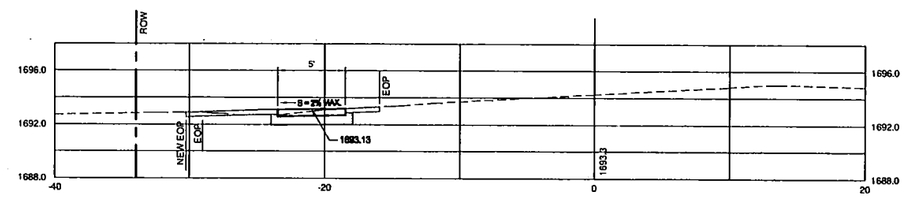

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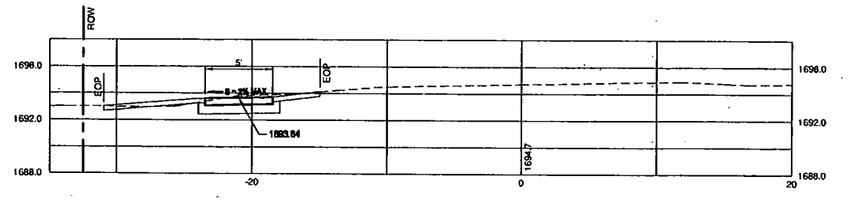

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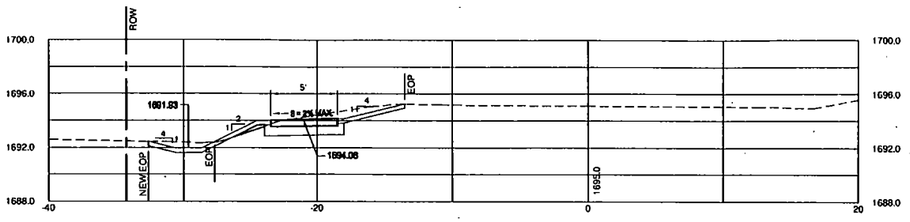
FINAL PLANS
APRIL 20, 2015

CROSS SECTIONS	**DOVER VALLEY TRAIL SEGMENT A SIDEWALK** **DOVER STP EH12 (3)**	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com LAD PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 14



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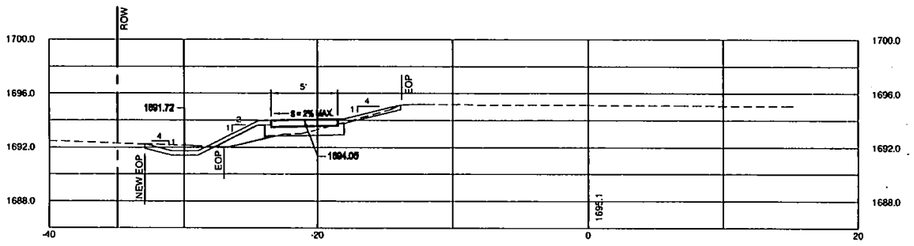

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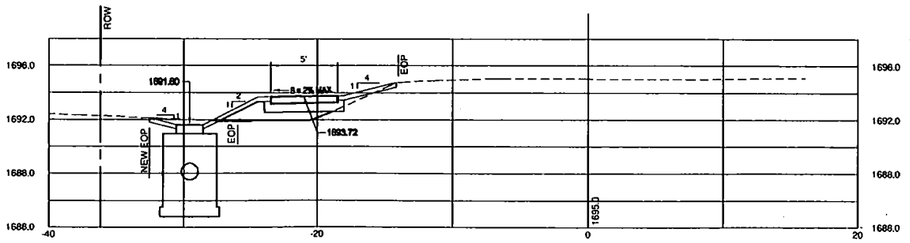

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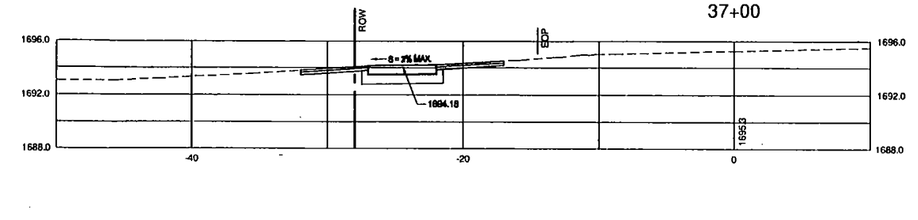

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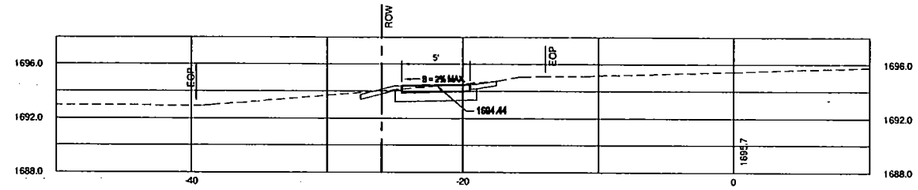

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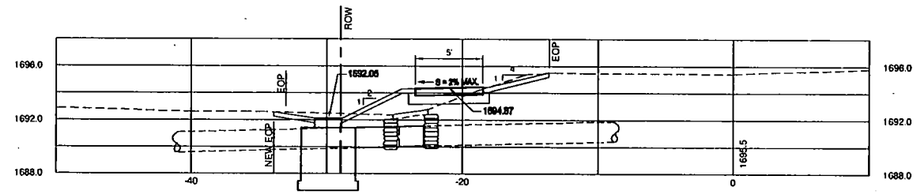

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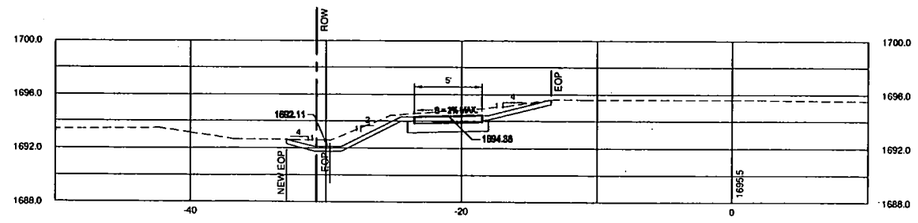

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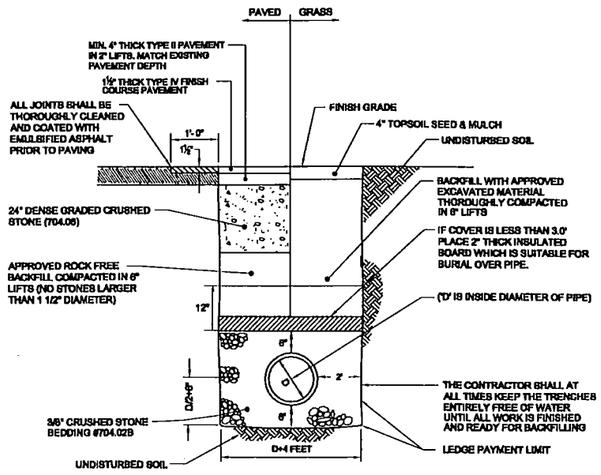
FINAL PLANS
APRIL 20, 2015

CROSS SECTIONS	**DOVER VALLEY TRAIL SEGMENT A SIDEWALK** **DOVER STP EH12 (3)**	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4430 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 15

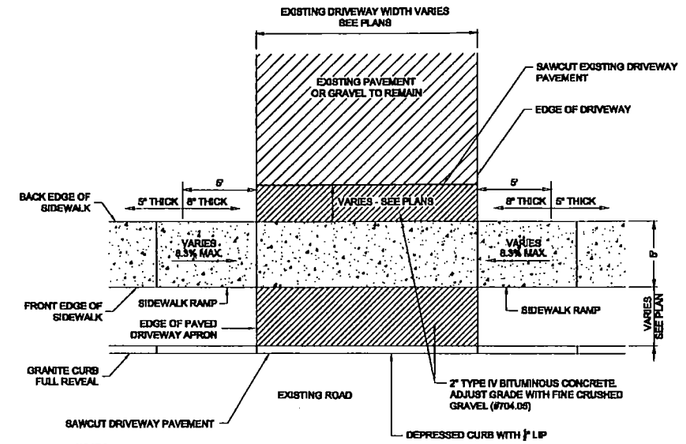
GENERAL CONSTRUCTION SPECIFICATIONS

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2011 AND ITS LATEST REVISIONS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (2009 EDITION) AND THESE PLANS.
2. THE CONTRACTOR SHALL CONTACT ALL UTILITIES BEFORE EXCAVATION TO VERIFY THE LOCATION OF ANY UNDERGROUND LINES. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" AND THE TOWN OF DOVER PRIOR TO ANY EXCAVATION.
3. UTILITIES INFORMATION SHOWN HEREON WERE OBTAINED FROM BEST AVAILABLE SOURCES AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. EXPLORATORY EXCAVATION SHALL BE PERFORMED IN THE LOCATIONS SHOWN ON THE PLANS. ADDITIONAL EXPLORATORY EXCAVATION SHALL BE COORDINATED WITH AND SUBJECT TO THE RESIDENT ENGINEERS APPROVAL. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON. THE CONTRACTOR SHALL CONNECT OR RECONNECT ALL UTILITIES TO THE NEAREST SOURCE THROUGH COORDINATION WITH UTILITY OWNER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE DUST CREATED AS A RESULT OF CONSTRUCTION DOES NOT CREATE A NUISANCE OR A SAFETY HAZARD. THE CONTRACTOR SHALL WET SECTIONS OF THE CONSTRUCTION AREA WITH WATER AND/OR SWEEP ASPHALT ROADS WITH A POWER BROOM (TYPE 1) OR A STREET SWEEPER (POWER BROOM TYPE II) AS DUST CONTROL ON A DAILY BASIS, OR AT MORE FREQUENT INTERVALS AS DIRECTED BY THE ENGINEER AND/OR OWNER.



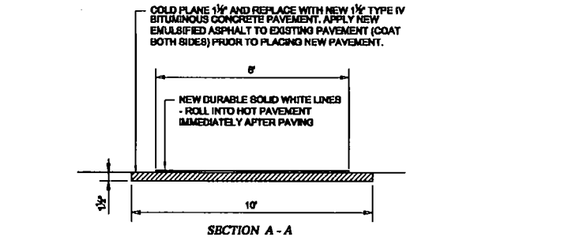
NOTES:
1. SEE OPTION PIPE SPECIAL PROVISION FOR A LIST OF WORK AND MATERIALS THAT ARE INCIDENTAL TO THE SPECIAL PROVISION OPTION PIPE ITEMS.
2. REMOVAL OF EXISTING CONCRETE IN ROADWAY PAID UNDER SOLID ROCK EXCAVATION (ITEM 203.16). LEDGE ENCOUNTERED WITHIN THE PAYMENT LIMIT FOR THE TRENCH SHALL BE PAID UNDER SOLID ROCK EXCAVATION (ITEM 203.16). REMOVAL OF EXISTING PAVEMENT PAID UNDER EXCAVATION OF SURFACES AND PAVEMENTS (ITEM 203.26). SAW CUTTING ASSOCIATED WITH THESE ITEMS IS INCIDENTAL TO PAY ITEMS 203.16 AND 203.26.

TYPICAL STORM TRENCH
NTS

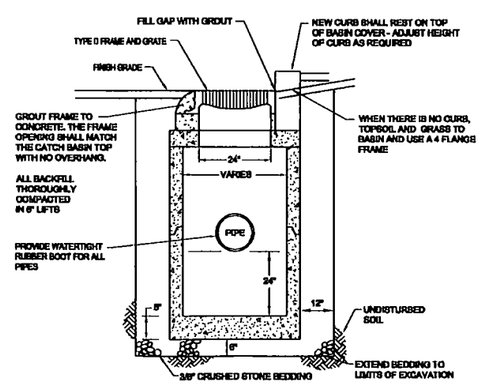


NOTES:
1. SUBBASE MATERIALS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY USING THE STANDARD PROCTOR TEST, ACCORDING TO ASTM D698.
2. EMULSIFIED ASPHALT SHALL BE APPLIED TO THE FACE OF CURB BELOW GRADE, EDGE OF SIDEWALK AND TO THE EXISTING PAVEMENT EDGE. EMULSIFIED ASPHALT SHALL BE APPLIED UNDER PRESSURE OR WITH A "NEW" BRUSH. OLD OR DRIED OUT BRUSHES SHALL NOT BE USED.

TYPICAL BITUMINOUS CONCRETE DRIVEWAY APRON WITH SIDEWALK DETAIL
NTS



DURABLE BLOCK PATTERN CROSSWALK DETAIL
NTS



NOTES:
1. CATCH BASIN TOP ELEVATIONS SHALL BE ADJUSTED AS NEEDED SO THAT THE GRATE WILL BE SLIGHTLY DEPRESSED WITH THE PAVEMENT OVERLAY.
2. LEDGE PAYMENT LIMIT SHALL BE A MAXIMUM DISTANCE OF 24" FROM STRUCTURE.
3. ALL STRUCTURES TO BE DESIGNED BY A STRUCTURAL ENGINEER TO WITHSTAND AN H20 LOADING REQUIREMENT. INSIDE DIAMETER OF STRUCTURE WILL BE DETERMINED BY THE STRUCTURAL ENGINEER AND WILL VARY BASED ON SIZE AND ORIENTATION OF PIPES.
4. SEE SPECIAL PROVISIONS FOR A LIST OF WORK AND MATERIALS THAT ARE INCIDENTAL TO THE STRUCTURE.

TYPICAL PRECAST CONCRETE CATCH BASIN WITH CAST IRON GRATE
NTS

FINAL PLANS
APRIL 20, 2015

TYPICAL DETAILS & SPECIFICATIONS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 16

1. THIS EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT TO BE PERFORMED UNDER THIS CONTRACT INCLUDES STREETSCAPE, SIDEWALKS, CURBS, DRAINAGE, PAVEMENT MARKINGS, SIGNS AND OTHER HIGHWAY RELATED ITEMS. AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THIS PROJECT AREA.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 1.0 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS ALONG VT ROUTE 100 IN THE TOWN OF DOVER WITH MINOR GRADE CHANGES FOR THE PROPOSED SIDEWALK.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE NORTH BRANCH OF THE DEERFIELD RIVER IS THE ONLY WATER SOURCE ON THE PROJECT SITE. THE RIVER IS CLASSIFIED AS MODERATELY STEEP, NARROW, WITH A CONFINED CHANNEL AT THE SITE. THE RIVER BED CONSISTS OF GRAVEL, COBBLES AND BOULDERS. THERE ARE A NUMBER OF DROP INLETS ON SITE DRAINING FROM THE ROADWAY TO THE RIVER. DUE TO THE NATURE OF THE SURROUNDING TERRAIN THE PROJECT SITE COULD RECEIVE RUNOFF WATER FROM A FEW NEARBY SLOPES.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF GRASSED LAWNS AND GRAVEL & PAVED DRIVES. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY INSTALLATION OF THE NEW OUTFALL CULVERT. UPON PROJECT COMPLETION, THE CHANNEL WILL BE ARMORED WITH STONE FILL TYPE IV AS SPECIFIED ON THE PLANS. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDHAM, VERMONT. SOILS ON THE PROJECT SITE ARE SHEEPSCOT FINE SANDY LOAM, 3% TO 8% SLOPES, "K FACTOR" = 0.17. THE SOIL IS CONSIDERED TO HAVE LOW EROSION POTENTIAL.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:
0.0 - 0.23 = LOW EROSION POTENTIAL
0.24 - 0.36 = MODERATE EROSION POTENTIAL
0.37 - HIGHER = HIGH EROSION POTENTIAL

1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: YES - HISTORIC DISTRICT, NO ARCHEOLOGICAL
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: NORTH BRANCH OF THE DEERFIELD RIVER
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT FALLS UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR LOW RISK PROJECTS. ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC).

1.4.2 LIMIT DISTURBANCE AREA
PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION
TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTORS PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

1.4.4 INSTALL SEDIMENT BARRIERS
SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, WOVEN WIRE REINFORCED SILT FENCE SHALL BE USED INSTEAD OF SILT FENCE WITHIN 100 FEET UPSLOPE OF RECEIVING WATERS.

1.4.5 DIVERT UPLAND RUNOFF
DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF
CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

STONE CHECK DAMS WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN, AT A MINIMUM.

1.4.7 CONSTRUCT PERMANENT CONTROLS
PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS.

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION
ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION
VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

1.4.10 STABILIZE SOIL AT FINAL GRADE
EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

1.4.11 DE-WATERING ACTIVITIES
DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

TREATMENT OF DEWATERING COFFERDAM IS ANTICIPATED. A LOCATION FOR TREATMENT HAS BEEN PROPOSED AND IS SHOWN ON THE PLANS. HOWEVER THE SPECIFIC MEANS FOR TREATMENT OF DISCHARGE SHALL BE PROVIDED BY THE CONTRACTOR.

1.4.12 INSPECT YOUR SITE
INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

1.5 SEQUENCE AND STAGING

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

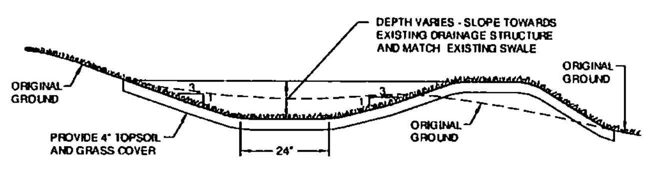
1.5.1 CONSTRUCTION SEQUENCE

1.5.2 OFF-SITE ACTIVITIES
IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SPECIFICATION 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

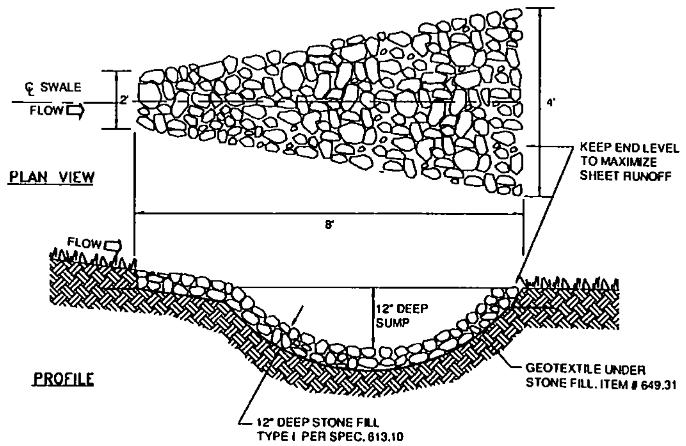
1.5.3 UPDATES

EROSION PREVENTION AND SEDIMENT CONTROL CONSTRUCTION EVENT SEQUENCING

1. THIS PROJECT DOES NOT NEED COVERAGE UNDER THE VERMONT CONSTRUCTION STORMWATER PERMIT PROGRAM. HOWEVER, THE CONTRACTOR SHALL FOLLOW THE VT DEC EROSION PREVENTION AND SEDIMENT CONTROL BEST PRACTICES FOR LOW RISK SITES.
2. THE CONTRACTOR SHALL NOT HAVE DISTURBED EARTH IN ANY ONE LOCATION FOR MORE THAN 14 CONSECUTIVE CALENDAR DAYS WITHOUT TEMPORARY OR FINAL STABILIZATION.
3. THE AREA OF DISTURBED SOILS AND THE DURATION OF EXPOSURE OF THE DISTURBED SOILS SHALL BE MINIMIZED. TO ACCOMPLISH THIS, WORK EFFORT SHOULD BE FOCUSED ON THE COMPLETION AND STABILIZATION OF ONE WORK ITEM COMPONENT BEFORE PROCEEDING TO THE NEXT WORK ITEM COMPONENT.
4. FOR CONSTRUCTION OF THE SIDEWALKS AND CURB EXTENSION, ONLY THAT AREA NECESSARY FOR INSTALLATION SHALL BE DISTURBED.
5. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED DAILY AND SHALL BE PROMPTLY REPAIRED, REPLACED, OR ADDITIONAL MEASURES TAKEN TO CORRECT DEFICIENCIES.
6. DURING CONSTRUCTION, AREAS OF COMPLETED WORK SHALL BE SEEDED AND MULCHED WITHIN 48 HOURS OF FINISH GRADING. THIS SHALL INCLUDE CUT OR FILL SLOPES, AND GRASS AREAS.
7. ALL FINISHED SLOPES SHALL BE 3H:1V OR FLATTER OR AS INDICATED ON PLANS. WHERE EROSION OCCURS FOLLOWING MULCHING, EROSION MATTING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
8. DISTURBED AREAS THAT ARE NOT BEING ACTIVELY WORKED SHALL BE STABILIZED WITHIN 24 HOURS WITH TEMPORARY SEED AND MULCH OR MATTING.
9. THE CONTRACTOR SHALL REMOVE ALL FENCING UPON STABILIZATION AND REVEGETATION.
10. DUST SHALL BE CONTROLLED IN ALL AREAS USING WATER AS NEEDED.



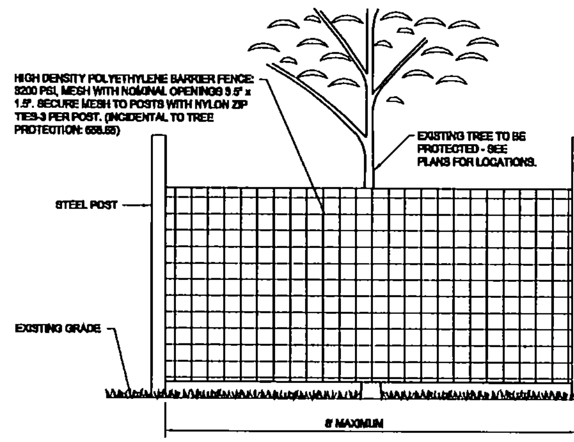
TYPICAL DRAINAGE SWALE SECTION
NTS



TYPICAL DRAINAGE SWALE OUTFALL
NTS

TREE AND PLANT PROTECTION

1. PRIOR TO START OF CONSTRUCTION, INSTALL TEMPORARY PROTECTION ZONE (TPZ) FENCE IN LOCATIONS SHOWN ON PLANS FOR TREE AND PLANT PROTECTION. TPZ FENCE SHALL BE PLACED AT THE EDGE OF TREE DRIP LINES. SEE DETAIL THIS SHEET.
2. TPZ FENCE SHALL PROTECT EXISTING TREES, SHRUBS AND OTHER VEGETATION THROUGHOUT CONSTRUCTION AGAINST CUTTING, BREAKING OR SKINNING OF ROOTS; SKINNING AND BRUISING OF BARK; SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS; EXCESS FOOT OR VEHICULAR TRAFFIC; AND PARKING OF VEHICLES.
3. WHERE TEMPORARY CLEARANCE IS NEEDED DURING CONSTRUCTION THAT MAY CONFLICT WITH EXISTING TREES, BRANCHES SHALL BE TIED BACK TO HOLD THEM OUT OF THE CLEARANCE ZONE.
4. WHEN EXCAVATION IS TO OCCUR IN CLOSE PROXIMITY TO EXISTING TREES, ROOT PRUNING SHALL BE DONE PRIOR TO CONSTRUCTION. ROOTS SHALL BE CLEANLY CUT, WITH CUTS TO THE DEPTH OF THE REQUIRED EXCAVATION. WHEN COMPLETED, REPLACE SOIL IN THE TRENCH AREA.
5. ROOTS ENCOUNTERED DURING EXCAVATION IN THE VICINITY OF TREE PROTECTION ZONES SHALL BE CLEANLY CUT AND PROTECTED DURING CONSTRUCTION OPERATIONS. TEMPORARILY COVER EXPOSED ROOTS WITH A DOUBLE LAYER OF DAMPENED BURLAP TO PREVENT ROOTS FROM DRYING OUT UNTIL THEY CAN BE COVERED WITH SOIL. COVER ROOTS WITH SOIL AS SOON AS POSSIBLE REMOVING BURLAP FIRST.
6. WATER EXISTING TREES AND OTHER VEGETATION TO REMAIN WITHIN LIMITS OF CONTRACT WORK AS REQUIRED TO MAINTAIN THEIR HEALTH DURING THE COURSE OF CONSTRUCTION OPERATIONS.
7. IF ANY TREES OR SHRUBS DESIGNATED TO BE SAVED ARE DAMAGED AND REPLACEMENT IS REQUIRED, TREES OR SHRUBS OF THE SAME SPECIES AND VARIETY SHALL BE PURCHASED AND PLANTED BY THE CONTRACTOR. THE TOTAL INCH DIAMETER OF THE REPLACEMENT TREES OR SHRUBS SHALL EQUAL THE DIAMETER OF THE TREE OR SHRUB TO BE REPLACED.
8. PRUNING OF EXISTING TREES, AS IDENTIFIED ON THE PLANS, SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL SOCIETY OF ARBORICULTURE'S *TREE PRUNING GUIDELINES*, THE ANSI A300 PRUNING STANDARD AND THE MOST RECENT EDITION OF ANSI Z133.1.
9. IF UNDERGROUND UTILITIES MUST TRAVERSE THE PROTECTION AREA, THEY SHALL BE TUNNELED OR BORED UNDER THE TREE.
10. REMOVE TEMPORARY PROTECTION DEVICES AND FACILITIES INSTALLED DURING COURSE OF WORK AFTER COMPLETION OF ALL WORK AND RESTORE PLANT PROTECTION AREAS TO THEIR ORIGINAL CONDITION.



TREE PROTECTION ZONE DETAIL
NTS

TURF ESTABLISHMENT

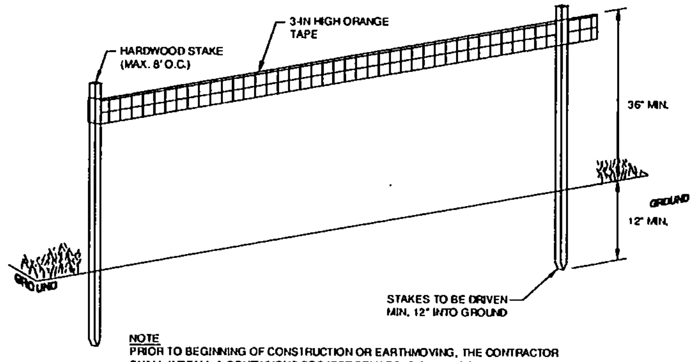
URBAN AREA MIX					
	LBS/AC				
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
42.5%	34	68	CREEPING RED FESCUE	85%	98%
10.0%	8	16	PERENNIAL RYE GRASS	90%	95%
42.5%	34	68	KENTUCKY BLUE GRASS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	85%	95%
100%	80	160			

SOIL AMENDMENT GUIDANCE			
FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	*FOLLOW*	PELLETIZED	*FOLLOW*
500 LBS/AC	*MANUFACTURER*	2 TONS/AC	*MANUFACTURER*

CONSTRUCTION GUIDANCE

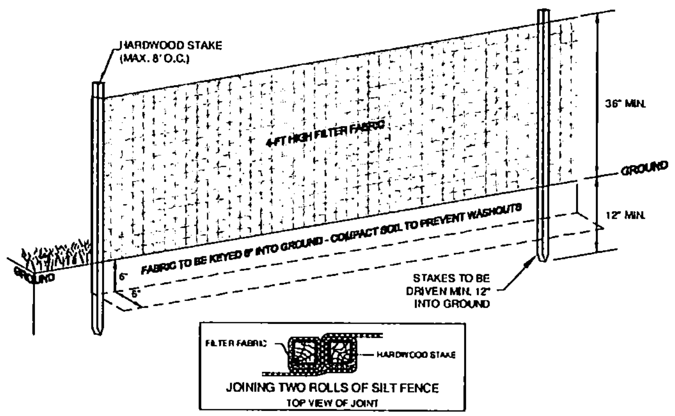
1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
7. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
8. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 FOR SEED (PAY ITEM 651.15)



NOTE
PRIOR TO BEGINNING OF CONSTRUCTION OR EARTHMOVING, THE CONTRACTOR SHALL INSTALL A CONTINUOUS PROJECT DEMARCATION FENCE ON THE EPSC PLANS.

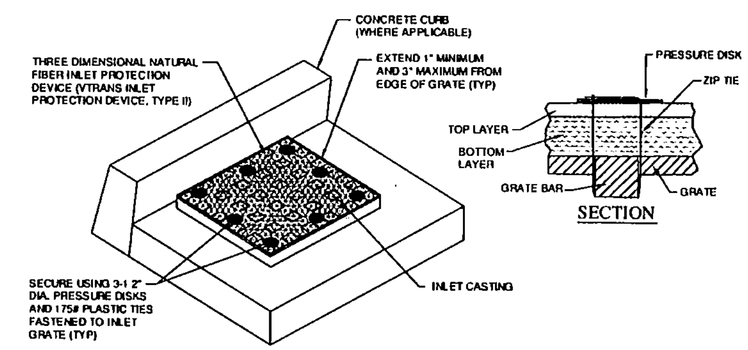
PROJECT DEMARCATION FENCE
NTS



EROSION CONTROL SPECIFICATIONS

1. PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTHMOVING, THE CONTRACTOR SHALL INSTALL A CONTINUOUS PROJECT DEMARCATION FENCE, (PDF) AS SHOWN ON THESE PLANS.
2. TO ENSURE PROPER FUNCTION, THE SILT FENCE SHALL BE PROPERLY INSTALLED. THIS INCLUDES DRIVING THE POSTS TO A DEPTH OF 12 INCHES, KEYING THE SILT FENCE FABRIC 6 INCHES INTO THE GROUND, AND COMPACTING THE SOIL OVER THE KEYED-IN PORTION OF THE FABRIC. USE ONLY MANUAL METHODS OF INSTALLATION WITHIN WETLANDS AND BUFFER ZONES.
3. THE SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION OF THE PROJECT AND UNTIL ESTABLISHMENT OF VEGETATION SUFFICIENT TO PREVENT SOIL EROSION. AFTER WORK IS COMPLETE AND THE DISTURBED SOIL HAS BEEN STABILIZED, THE CONTRACTOR SHALL REMOVE ALL SILT FENCE FROM THE SITE.
4. PROPER SILT FENCE MAINTENANCE SHALL INCLUDE INSPECTIONS AT REGULAR INTERVALS AND AFTER EVERY HEAVY RAINFALL TO ENSURE THAT THERE ARE NO BROKEN POSTS, FABRIC TEARS, WASHOUTS OF THE BOTTOM EDGE OF THE FABRIC, OR EXCESSIVE SEDIMENT ACCUMULATION. ANY DAMAGE OR DEFECTS SHALL BE REPAIRED IMMEDIATELY. SEDIMENT ACCUMULATION OF MORE THAN ONE-QUARTER THE HEIGHT OF THE FABRIC SHALL BE REMOVED AND PLACED IN AN APPROPRIATE AREA OUTSIDE WETLANDS AND BUFFER ZONES.
5. THE CONTRACTOR SHALL INSTALL SILT FENCE AT OTHER LOCATIONS AS NEEDED.
6. WHERE WOVEN WIRE REINFORCEMENT IS USED, THE WOVEN WIRE SHALL BE 14 GAUGE MINIMUM WITH A 150 MM (6 INCH) MAXIMUM MESH OPENING. PAID AS ITEM #649.515.

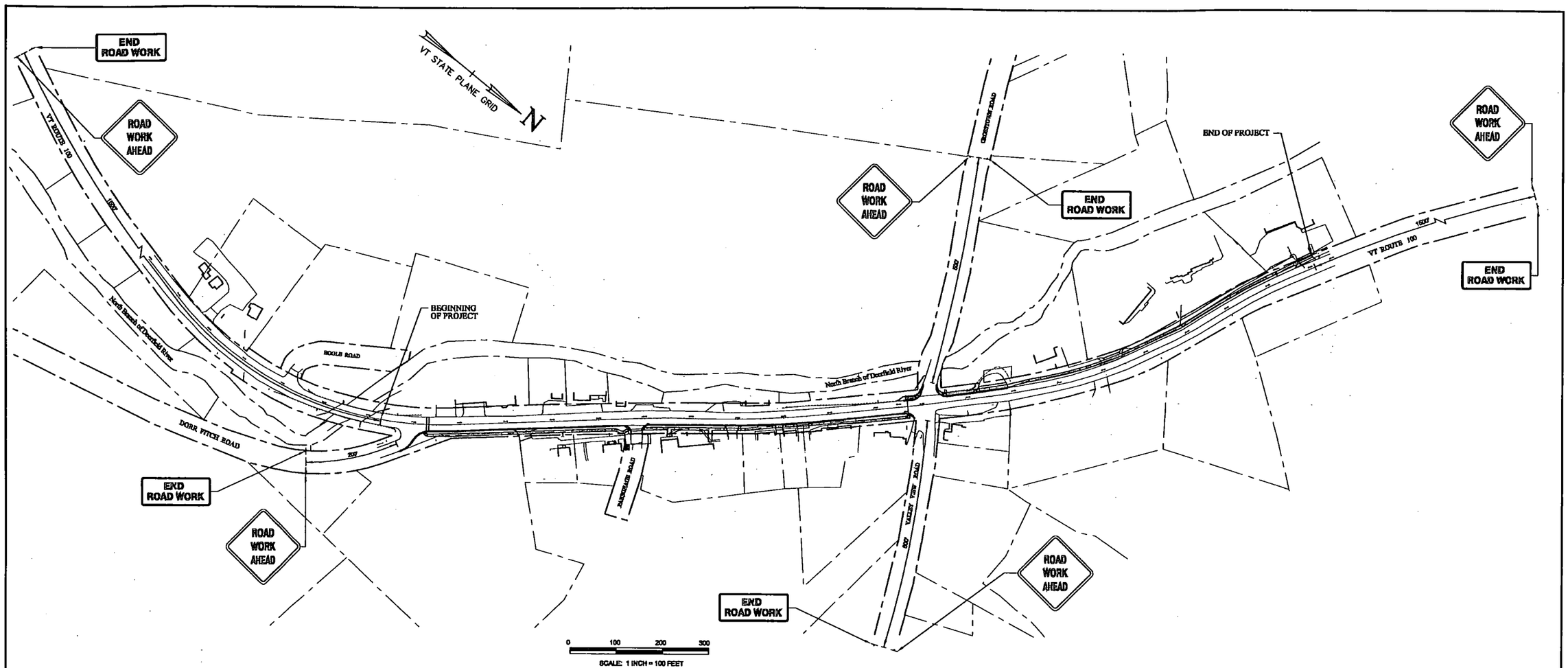
TEMPORARY EROSION CONTROL FENCE
NTS



INLET PROTECTION (TYPE II)
NTS

FINAL PLANS
APRIL 20, 2015

TYPICAL DETAILS & SPECIFICATIONS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP BH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 17



TEMPORARY TRAFFIC CONTROL NOTES

1. ALL TEMPORARY CONTROL DEVICES SHALL MEET OR EXCEED VTRANS STANDARD DETAILS. WHERE THE STANDARD DETAILS CONFLICT WITH THE MUTCD, THE MUTCD SHALL GOVERN.
2. FOR ANY WORK WITHIN THE HIGHWAY RIGHT-OF-WAY A MINIMUM OF ONE-WAY THRU TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. CONTINUOUS TWO-WAY TRAFFIC SHALL BE MAINTAINED AT NIGHT, ON WEEKENDS AND HOLIDAYS, DURING PEAK TRAFFIC AND WHENEVER POSSIBLE DURING CONSTRUCTION.
3. SHORT DURATION TEMPORARY TRAFFIC CONTROL SIGNING AND CHANNELIZING DEVICES SHALL BE IN ACCORDANCE WITH THE APPROPRIATE MUTCD STANDARDS (PART 6). TYPICAL APPLICATIONS 3.10, 22 AND 23 ARE USEFUL EXAMPLES. VARIATIONS IN THE SIGNING PACKAGES MAY BE DICTATED BY UNIQUE GEOMETRY, SPECIFIC CONSTRUCTION ACTIVITIES, AND/OR TRAFFIC CONDITIONS.
4. APPROACH CONSTRUCTION SIGNING SHALL REMAIN IN PLACE DURING THE ENTIRE CONSTRUCTION PERIOD.
5. THE CONTRACTOR SHALL NOT WORK WITHIN THE HIGHWAY ROW WITHOUT THE APPROPRIATE CONSTRUCTION SIGNING AND TEMPORARY TRAFFIC CONTROL DEVICES IN PLACE.
6. TO FACILITATE THE FLOW OF TRAFFIC, THE TOWN SHALL HAVE AUTHORITY TO MODIFY THE CONTRACTOR'S ONGOING OPERATIONS OR PROPOSED METHODS OF CONSTRUCTION AS DEEMED NECESSARY FOR THE SAFETY, CONVENIENCE AND WELFARE OF THE TRAVELING PUBLIC. THE CONTRACTOR SHALL COMPLY WITH THE TOWN DIRECTIVES CONCERNING THIS MATTER.
7. THE MIXING OF TEMPORARY TRAFFIC CONTROL DEVICES (DRUMS, CONES, ETC.) ALONG A TANGENT HIGHWAY IS NOT ALLOWED. DRUMS SHOULD BE USED TO CHANNELIZE OR DELINEATE ROAD USERS FLOW WHILE RETROREFLECTORIZED CONES ARE BETTER SUITED TO DELINEATE DRIVES WITHIN THE WORK ZONE.
8. CONTRACTOR SHALL PROVIDE A MINIMUM 48 HOUR ADVANCE NOTICE TO PROPERTY OWNERS PRIOR TO COMMENCING WORK IN DRIVES. WHERE SIDEWALKS CROSS DRIVES, THEY SHALL BE CONSTRUCTED IN TWO PHASES, MAINTAINING ACCESS TO DRIVEWAYS AT ALL TIMES.
9. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN TO BUSINESSES AND RESIDENCES. ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF THE MUTCD PART 6 AND ADA ACCESSIBLE ROUTE REQUIREMENTS.
10. FLAGGERS AND/OR TRAFFIC CONTROL PERSONNEL SHALL DIRECT BICYCLISTS THROUGH THE CONSTRUCTION AREA IN THE SAME MANNER AS VEHICULAR TRAFFIC. PEDESTRIANS, WHEN PRESENT, SHALL BE ESCORTED THROUGH THE WORK AREA. THE CONTRACTOR SHALL DESIGNATE AN EMPLOYEE TO ESCORT PEDESTRIANS AROUND THE PERIMETER OF THE CONSTRUCTION SITE.
11. ANY SIDEWALK CLOSURES/PEDESTRIAN DETOURS THAT WILL BE LEFT IN PLACE OVERNIGHT MUST INCLUDE SIGNS THAT MEET THE MUTCD AND PEDESTRIAN CHANNELIZING DEVICES THAT MEET MUTCD AND ADA. CHANNELIZING DEVICES MUST HAVE A CONTINUOUS DETECTABLE BOTTOM EDGE PER MUTCD STANDARDS.
12. SIDEWALK CLOSED SIGNS (R9-9) SHALL BE REQUIRED IN ADVANCE OF THE WORK AREA ON COMPLETED PORTIONS OF THE PROJECT TO PREVENT PEDESTRIANS FROM ENTERING THE WORK ZONE.
13. THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.
14. THE CONTRACTOR'S OPERATIONS SHALL NOT OCCUPY SIDEWALKS EXCEPT WHERE PROPER PROTECTION AND A TEMPORARY PEDESTRIAN ACCESSIBLE ROUTE (TPAR) HAVE BEEN PROVIDED.

TEMPORARY CONSTRUCTION SIGNS

1. ALL SIGN STANDS AND POST INSTALLATION SHALL BE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM 350 (NCHRP) COMPLIANT.
2. ALL ROLL-UP SIGN MATERIAL SHALL HAVE ASTM D 4956-01 TYPE VI OR TYPE VII FLUORESCENT ORANGE RETRO-REFLECTIVE SHEETING.
3. ALL POST MOUNTED SIGNS SHALL HAVE ASTM D 4956-01 TYPE VIII OR TYPE IX FLUORESCENT ORANGE RETRO-REFLECTIVE SHEETING.
4. ALL STATIONARY SIGNS SHALL BE MOUNTED ON TWO 3 LBS/FT FLANGED CHANNEL POSTS. NO SIGN POSTS SHALL EXTEND OVER THE TOP EDGE OF THE SIGN INSTALLED ON SAID POSTS.
5. PRIOR TO PLACING TEMPORARY WORK ZONE SIGNS ON THE PROJECT, THE CONTRACTOR MUST FURNISH FOR THE TOWN'S APPROVAL A DETAIL FOR TEMPORARY WORK ZONE SIGNS ON STEEL POSTS SHOWING STUBS PROJECTING A MAXIMUM OF 4 INCHES ABOVE GROUND LEVEL AND BOLTS FOR SIGN POST ATTACHMENT SHALL BE NCHRP 350 COMPLIANT. IF IN THE CLEAR ZONE.

FLAGGERS AND UNIFORM TRAFFIC OFFICERS

FLAGGERS SHALL BE REQUIRED TO ATTEND A 4 HOUR APPROVED TRAINING COURSE AND CARRY THEIR FLAGGER CERTIFICATION CARD WITH THEM. THE CONTRACTOR SHALL PROVIDE COPIES OF ALL DOCUMENTATION OF THE CERTIFICATION OBTAINED FOR EACH FLAGGER ON THE PROJECT.

ALL FLAGGERS OR UTO SERVING AS A TRAINED FLAGGER SHALL WEAR SAFETY APPAREL MEETING REQUIREMENTS OF ISEA "AMERICAN NATIONAL STANDARD OF HIGH-VISIBILITY APPAREL" AND LABELED AS MEETING THE ANSI 107-1999 STANDARD PERFORMANCE FOR CLASS 2 RISK EXPOSURE. INDIVIDUALS ENGAGED IN TRAFFIC CONTROL SHALL WEAR THE HIGH-VISIBILITY VEST WITH "TRAFFIC CONTROL" VISIBLE, WITHOUT EXCEPTION.


W21-1a

W3-4

R9-9

QUALITY ASSURANCE PROGRAM:
INSPECTION LEVEL 3

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83(1986)

FINAL PLANS
APRIL 20, 2015

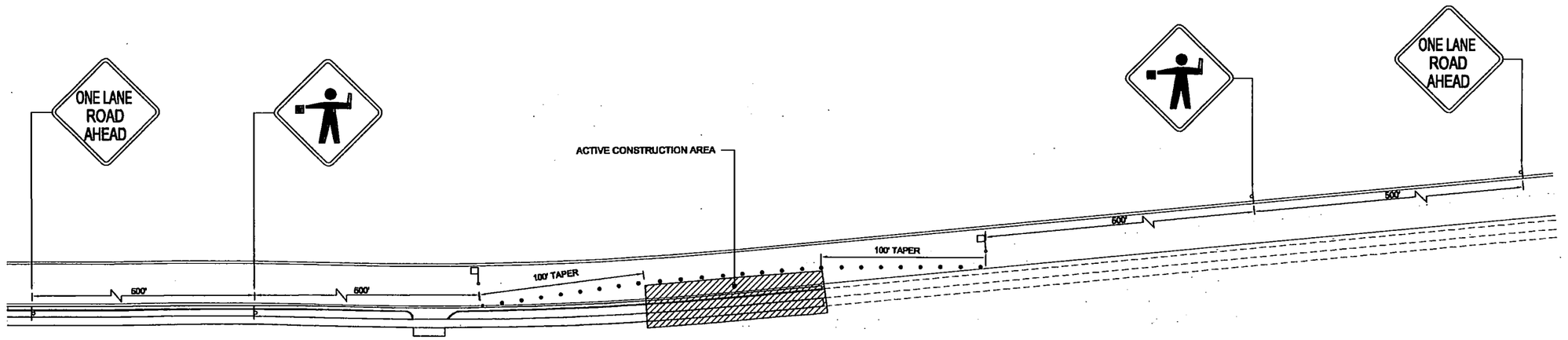
TRAFFIC CONTROL PLAN

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
DOVER STP EH12 (3)

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

LAD PROJECT NO.: 12049
DRAWN BY: BH
CHECKED BY: RD

SHEET: 18



TYPICAL SHORT-TERM LANE CLOSURE DETAIL

LEGEND

- 28" REFLECTORIZED CONES
- FLAGGER
- PORTABLE TRAFFIC CONTROL SIGN

NOTES:

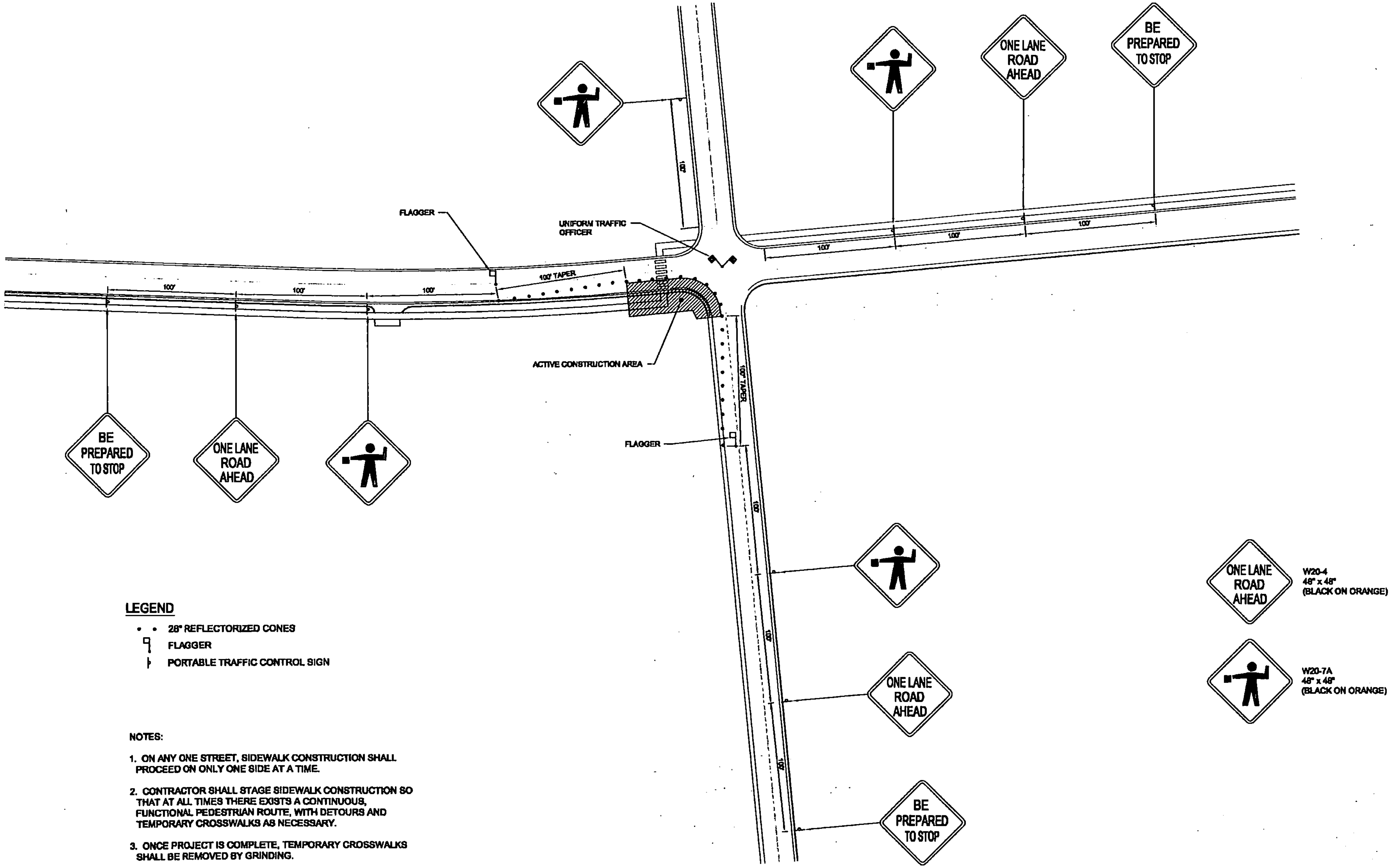
1. ON ANY ONE STREET, SIDEWALK CONSTRUCTION SHALL PROCEED ON ONLY ONE SIDE AT A TIME.
2. CONTRACTOR SHALL STAGE SIDEWALK CONSTRUCTION SO THAT AT ALL TIMES THERE EXISTS A CONTINUOUS, FUNCTIONAL PEDESTRIAN ROUTE, WITH DETOURS AND TEMPORARY CROSSWALKS AS NECESSARY.
3. ONCE PROJECT IS COMPLETE, TEMPORARY CROSSWALKS SHALL BE REMOVED BY GRINDING.

W20-4
48" x 48"
(BLACK ON ORANGE)

W20-7A
48" x 48"
(BLACK ON ORANGE)

FINAL PLANS
APRIL 20, 2015

TRAFFIC CONTROL PLAN	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: EH CHECKED BY: RD	SHEET: 19



LEGEND

- • • 28" REFLECTORIZED CONES
- FLAGGER
- PORTABLE TRAFFIC CONTROL SIGN

NOTES:

1. ON ANY ONE STREET, SIDEWALK CONSTRUCTION SHALL PROCEED ON ONLY ONE SIDE AT A TIME.
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3. ONCE PROJECT IS COMPLETE, TEMPORARY CROSSWALKS SHALL BE REMOVED BY GRINDING.

TYPICAL SHORT-TERM LANE CLOSURE AT INTERSECTION DETAIL

FINAL PLANS
APRIL 20, 2015

TRAFFIC CONTROL PLAN

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
DOVER STP EH12 (3)

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

L&D PROJECT NO.: 12049
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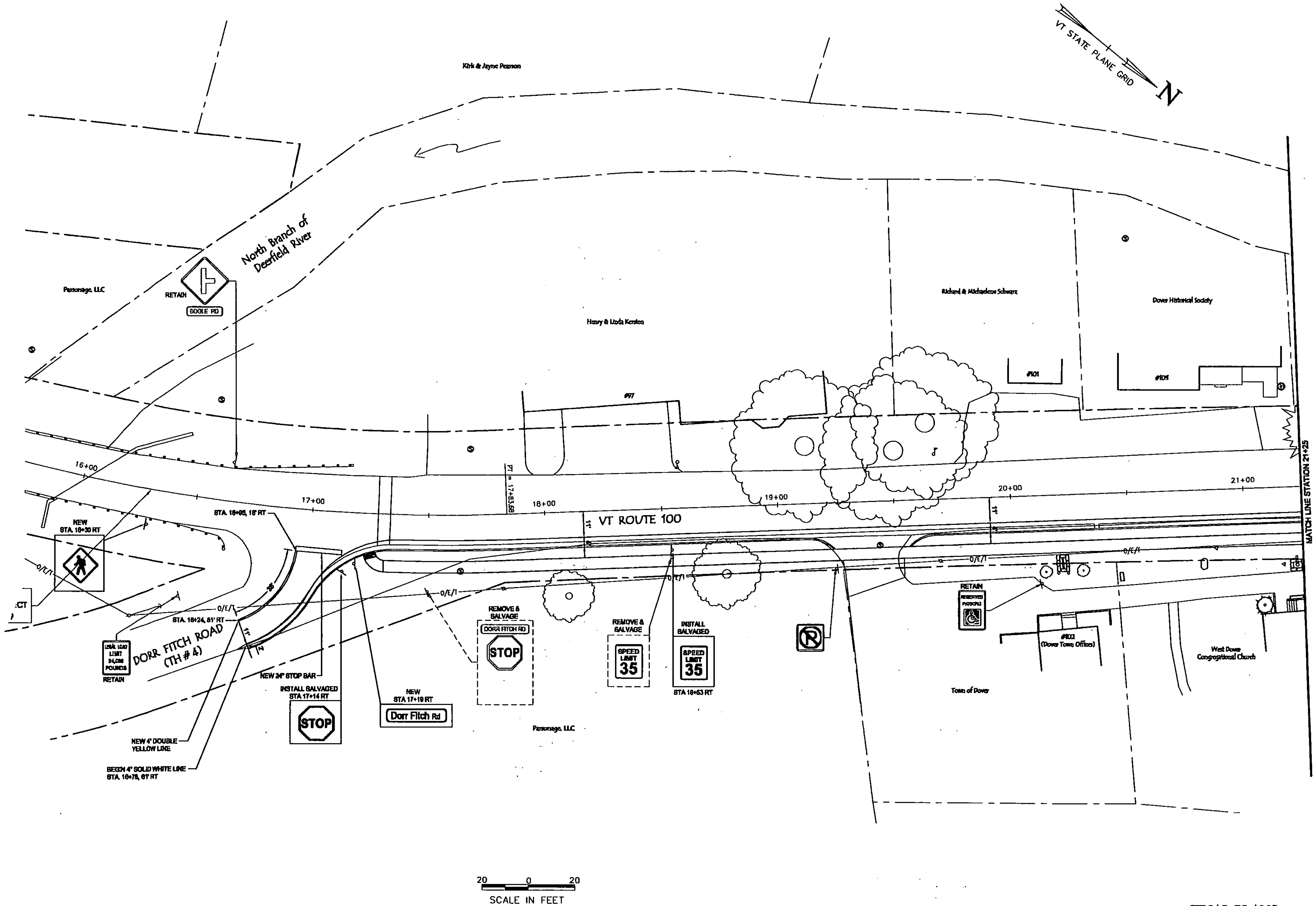
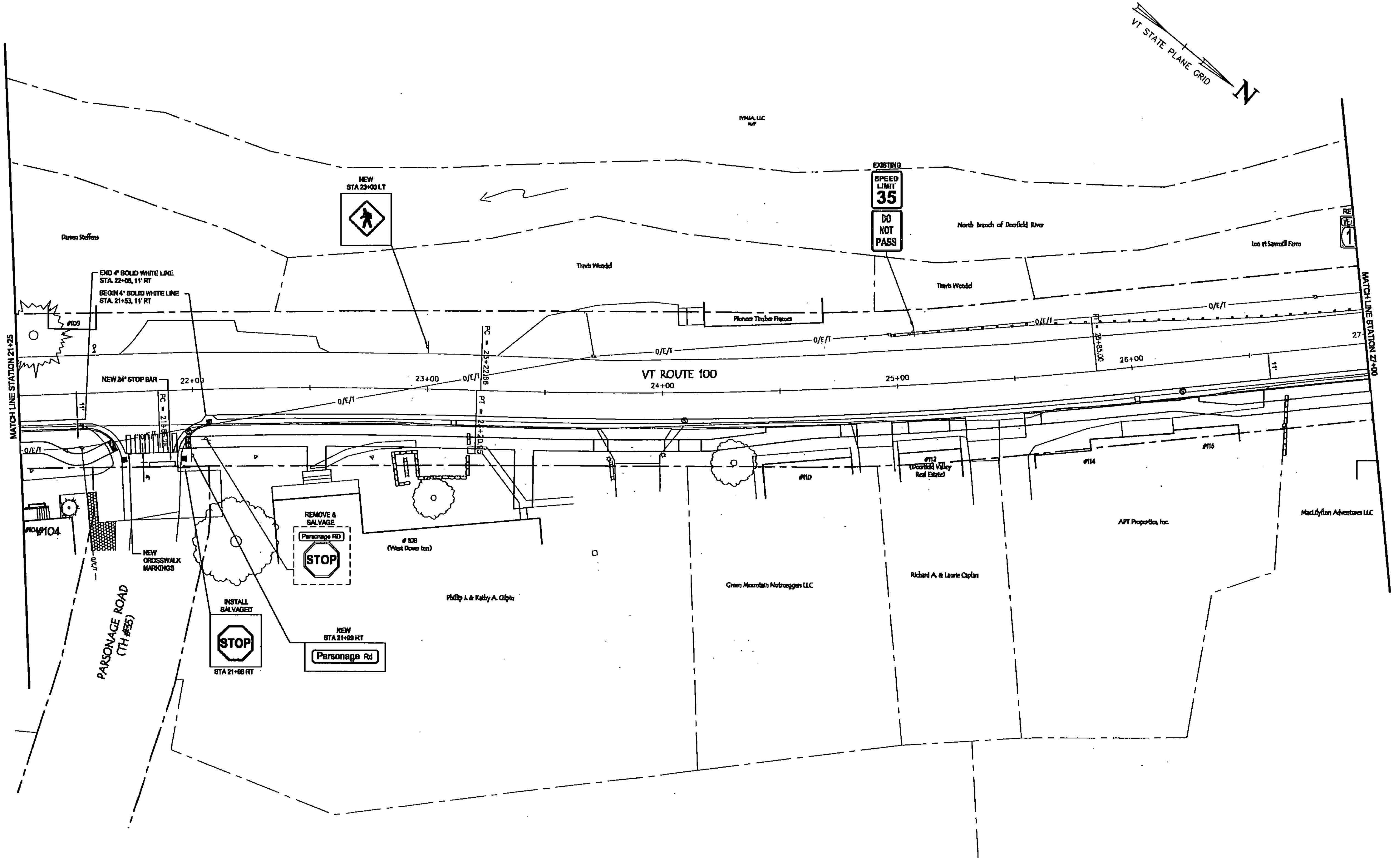


FINAL PLANS
APRIL 20, 2015

SIGNS & PAVEMENT MARKINGS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP BH12 (3) Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 21



FINAL PLANS
APRIL 20, 2015

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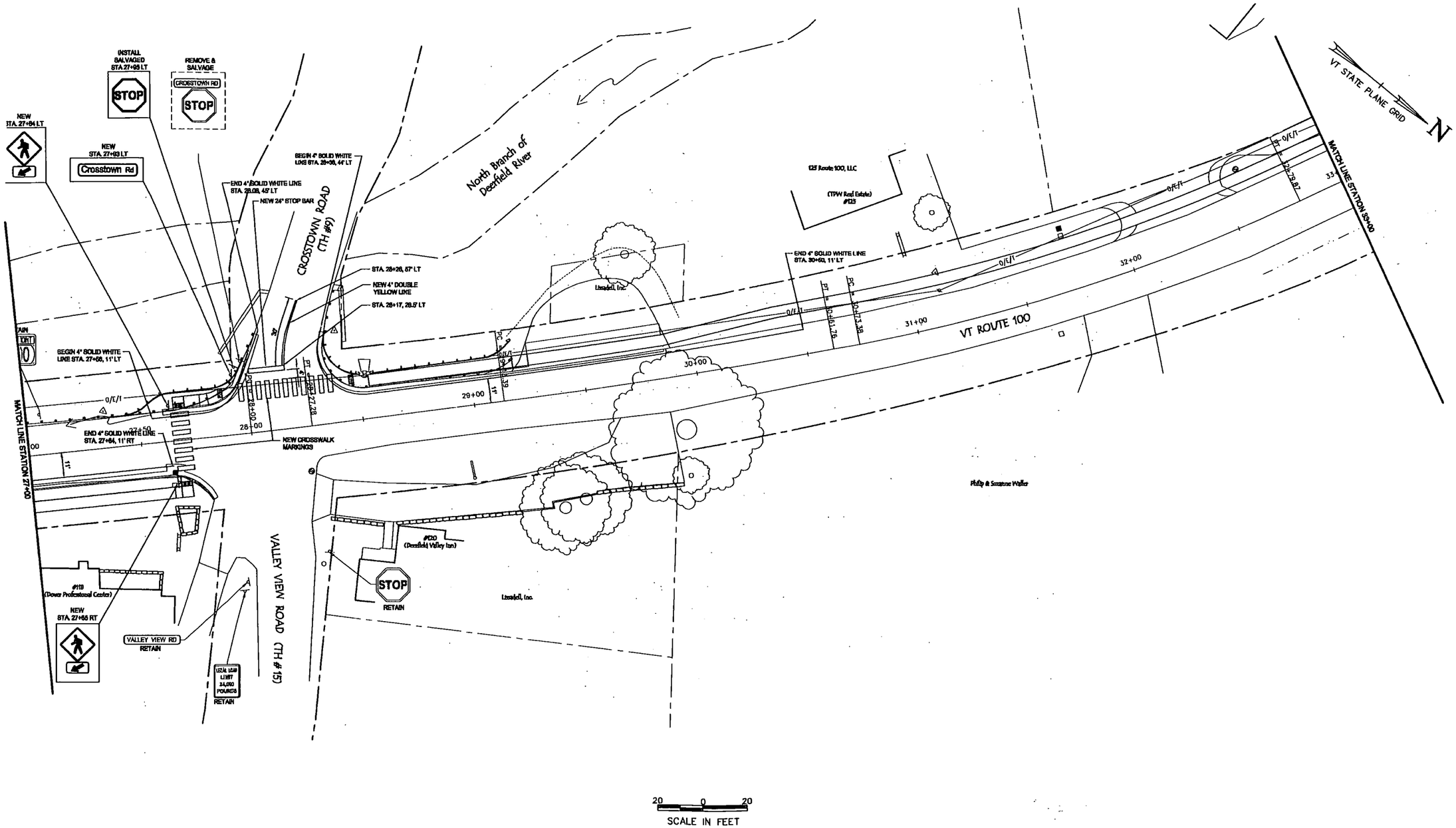
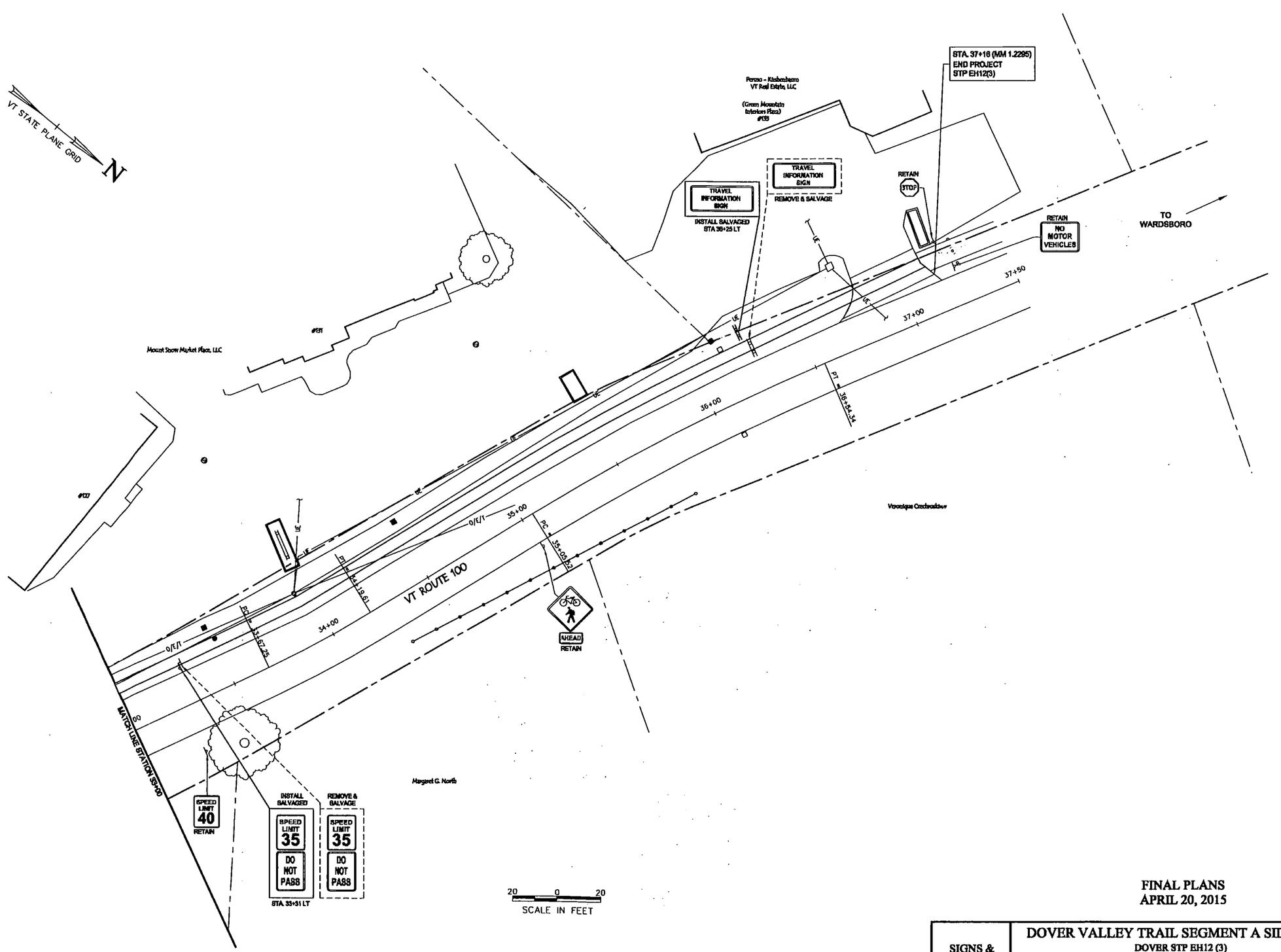


FINAL PLANS
APRIL 20, 2015

SIGNS & PAVEMENT MARKINGS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP BH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4430 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 23



FINAL PLANS
APRIL 20, 2015

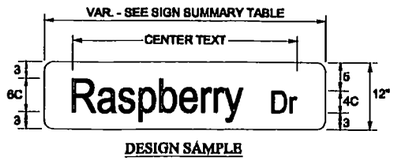
SIGNS & PAVEMENT MARKINGS	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: EH CHECKED BY: RD	SHEET: 24

SIGN SUMMARY TABLE

STATION	SIGN LEGEND	SIGN DIMENSIONS EACH	SIGN DIMENSIONS CALCULATED	WIDTH (in)	HEIGHT (in)	AREA (SF)	NEW SIGN POSTS NO. OF POSTS	SQUARE STEEL (in) 1.75	2.0	2.5	MUTCD (COLOR)
								lb/ft 1.68	2.42	3.36	
16+30 RT		1		30"	30"	6.25	1		15		W11-2 (FYG)
17+14 RT			1				1		15		
17+19 RT	Dorr Fitch Rd	1		54"	12"	4.5	2		(2)15		SEE DETAIL THIS SHEET
18+53, RT			1								INSTALL ON SALVAGED POST
21+05 RT			1				1		15		
21+99 RT	Parsonage Rd	1		48"	12"	4	2		(2)15		SEE DETAIL THIS SHEET
23+00 LT		1		30"	30"	6.25	1		15		W11-2 (FYG)
27+84 LT		1		30"	30"	6.25	1		15		W11-2 (FYG)
		1		24"	12"	2.0					W11-7p (FYG)
	TOTAL	6	5					FT	FT	FT	
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."		TOTAL		29.25	9			135			

SIGN SUMMARY TABLE

STATION	SIGN LEGEND	SIGN DIMENSIONS EACH	SIGN DIMENSIONS CALCULATED	WIDTH (in)	HEIGHT (in)	AREA (SF)	NEW SIGN POSTS NO. OF POSTS	SQUARE STEEL (in) 1.75	2.0	2.5	MUTCD / COLOR
								lb/ft 1.68	2.42	3.36	
27+66 RT		1		30"	30"	6.25	1		15		W11-2 (FYG)
		1		24"	12"	2.0					W11-7p (FYG)
STA 27+63, LT	Crosstown Rd	1		48"	12"	4	2		(2)15		SEE DETAIL THIS SHEET
STA 27+95, LT			1								INSTALL ON SALVAGED POST
33+21 LT			1								INSTALL ON SALVAGED POST
			1								
39+25 LT	BUSINESS INFORMATION		1								INSTALL ON SALVAGED POSTS
	TOTAL	3	4					FT	FT	FT	
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."		TOTAL		12.25	3			45			
		TOTALS		SF 41.5	12			FT 180			



DESIGN SAMPLE

STREET NAME SIGNS NOTES

DESIGN
EXCEPT AS SPECIFIED BELOW, LETTERS, DIGITS, ARROWS, SYMBOLS, SPACING AND TEXT DIMENSIONS SHALL CONFORM WITH THE "STANDARD HIGHWAY SIGNS BOOK - 2012 SUPPLEMENT" AND DESIGNS PRESCRIBED IN THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) ADOPTED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION (FHWA). STREET NAME SIGNS SHALL USE A 12" HIGH BLADE WITH SERIES "C" LETTERING. SPACING BETWEEN LETTERS IN EACH WORD SHALL BE KERNED AT 80%.

MATERIALS
THE MATERIAL FOR THE BLADES SHALL BE FLAT SHEET ALUMINUM WITH A MINIMUM THICKNESS OF 0.125 INCH. THE MOUNTING METHOD FOR STREET NAME SIGNS SHALL USE POST TOP MOUNTING BRACKETS HAVING A 12" SLOT LENGTH. HARDWARE FOR MOUNTING SIGNS TO POST SHALL BE INCIDENTAL TO OTHER ITEMS. THE MINIMUM VERTICAL CLEARANCE IS 8'-0" TO THE BOTTOM OF THE SIGN. FOR POST TOP MOUNTINGS, STREET NAME SIGNS SHALL HAVE TEXT ON BOTH SIDES. STREET NAME SIGNS SHALL HAVE 1.5" CORNER RADII.

COLORS
STREET NAME SIGNS SHALL HAVE REFLECTORIZED WHITE TEXT ON A REFLECTORIZED GREEN BACKGROUND.

FINAL PLANS
APRIL 20, 2015

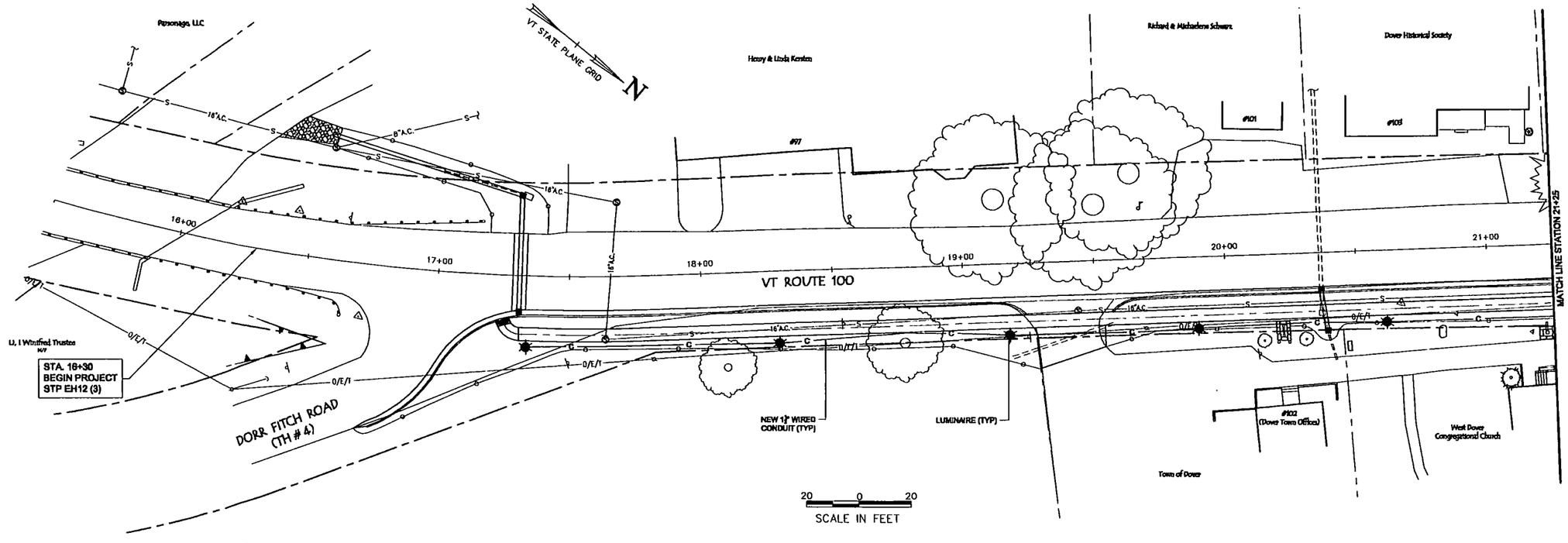
SIGN SUMMARY SHEET

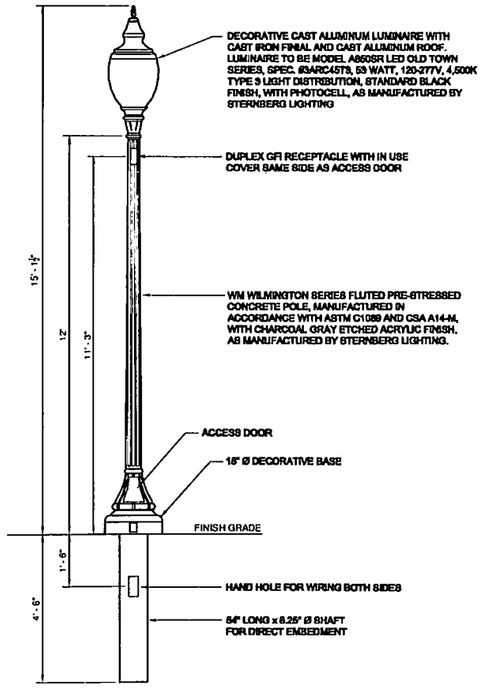
DOVER VALLEY TRAIL SEGMENT A SIDEWALK
DOVER STP EH12 (3)

Lamoureux & Dickinson Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

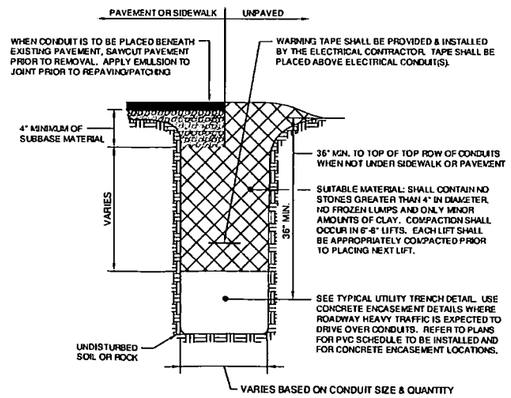
L&D PROJECT NO.: 12049
DRAWN BY: BH
CHECKED BY: RD

SHEET: 25





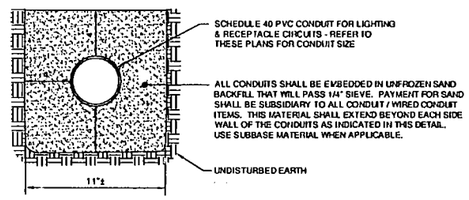
LUMINAIRE DETAIL
NTS



TYPICAL CONDUIT TRENCH SECTION
NTS

ITEM 630.620 - SPECIAL PROVISION (STREET LIGHT)
STA 17+34 RT
STA 18+29 RT
STA 19+17 RT
STA 19+89 RT
STA 20+61 RT

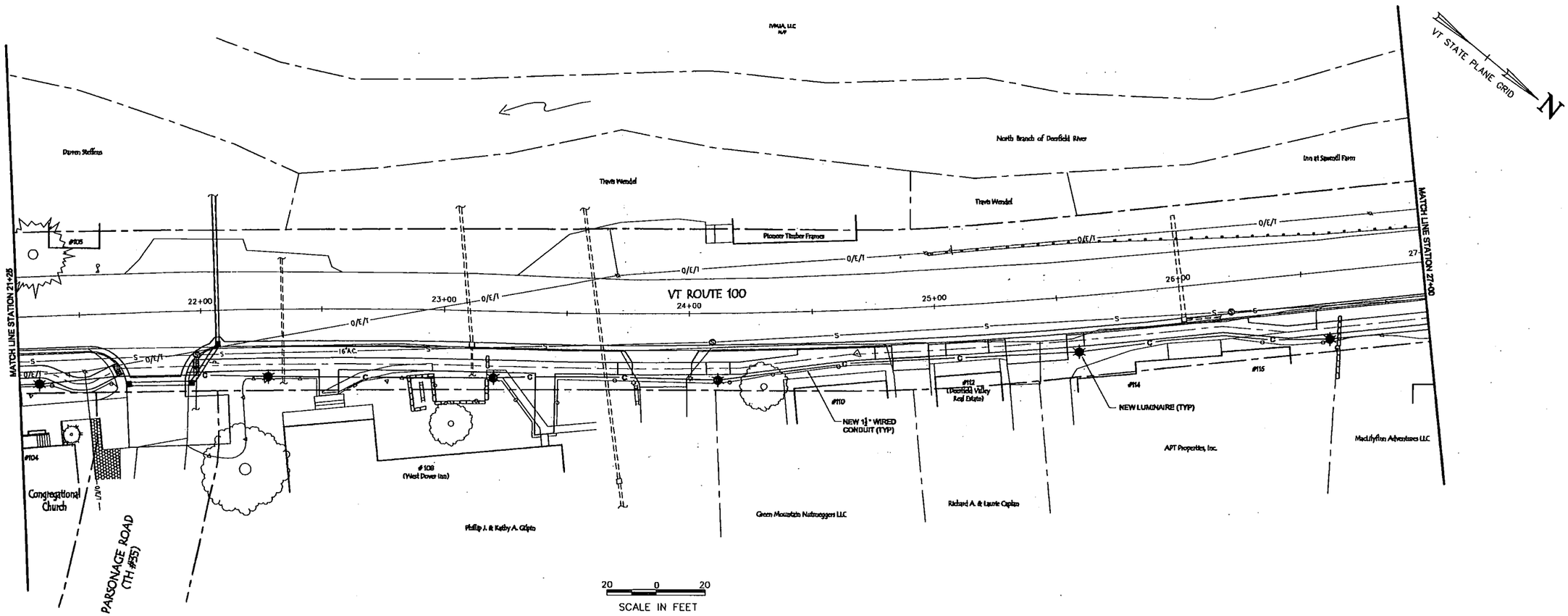
ITEM 678.23 - WIRED CONDUIT (1.5 INCH)
STA 17+34 - 21+25 RT



TYPICAL UTILITY LIGHTING & RECEPTACLE TRENCH DETAIL
NTS

FINAL PLANS
APRIL 20, 2015

LIGHTING PLAN	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	SHEET: 26
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-6450 www.LDengineering.com	L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD



ITEM 900.620 - SPECIAL PROVISION (STREET LIGHT)
STA 27+33 RT
STA 22+28 RT
STA 23+21 RT
STA 24+11 RT
STA 25+87 RT
STA 25+59 RT

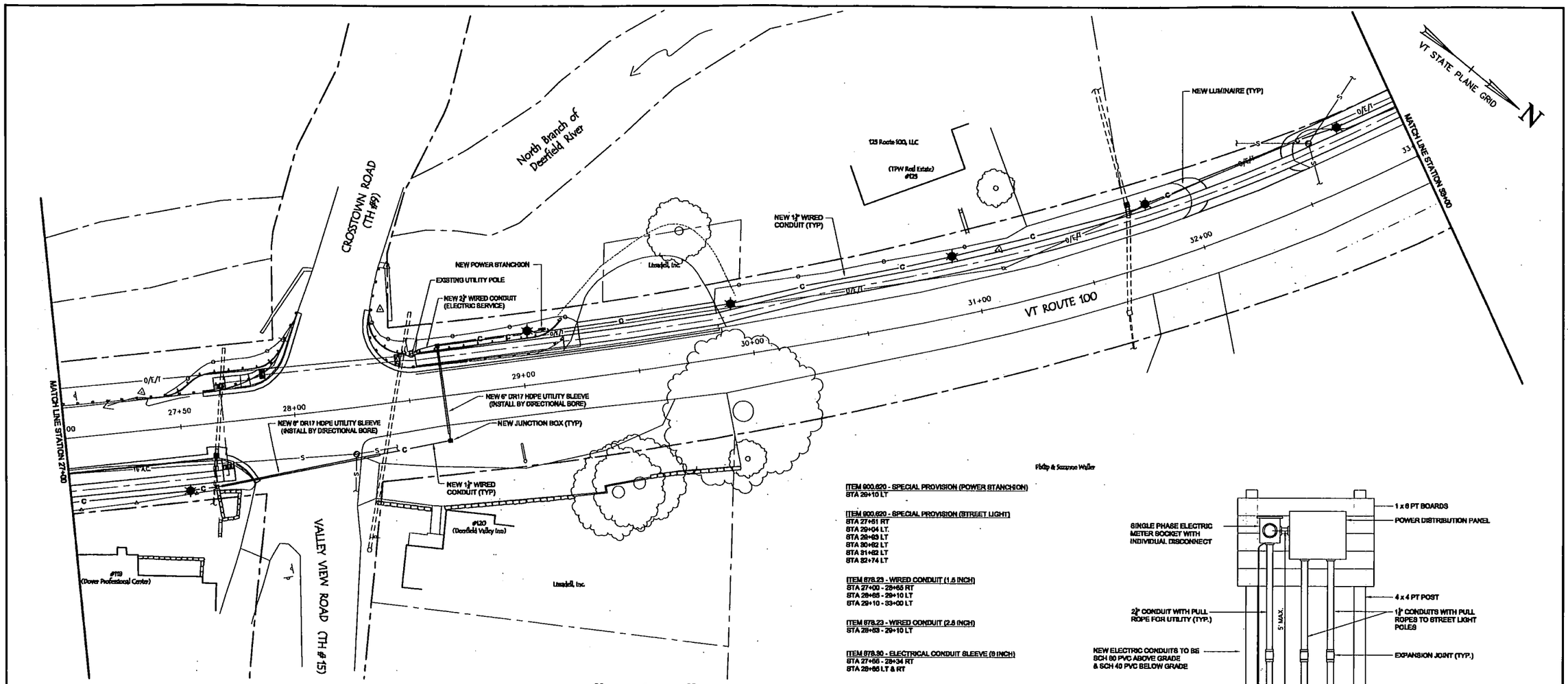
ITEM 878.23 - WIRED CONDUIT (1.5 INCH)
STA 21+25 - 27+00 RT

FINAL PLANS
APRIL 20, 2015

LIGHTING PLAN	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	SHEET: 27

Lamoureux & Dickinson Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4430 www.LDengineering.com

L&D PROJECT NUMBER: 12049
DRAWN BY: L&D
CHECKED BY: CHK / RJD



[ITEM 900.620 - SPECIAL PROVISION (POWER STANCHION)
STA 29+10 LT

[ITEM 900.620 - SPECIAL PROVISION (STREET LIGHT)
STA 27+51 RT
STA 29+04 LT
STA 28+93 LT
STA 30+82 LT
STA 31+82 LT
STA 32+74 LT

[ITEM 878.23 - WIRED CONDUIT (1.5 INCH)
STA 27+00 - 28+65 RT
STA 28+65 - 29+10 LT
STA 29+10 - 33+00 LT

[ITEM 878.23 - WIRED CONDUIT (2.5 INCH)
STA 29+53 - 29+10 LT

[ITEM 878.30 - ELECTRICAL CONDUIT SLEEVE (6 INCH)
STA 27+66 - 28+34 RT
STA 28+65 LT & RT

POWER DISTRIBUTION PANEL
STATION 29+10 LT

120/240 VOLT
1 PHASE, 3 WIRE
100 AMP

NQOD
ROUTE 100
SURFACE MOUNT

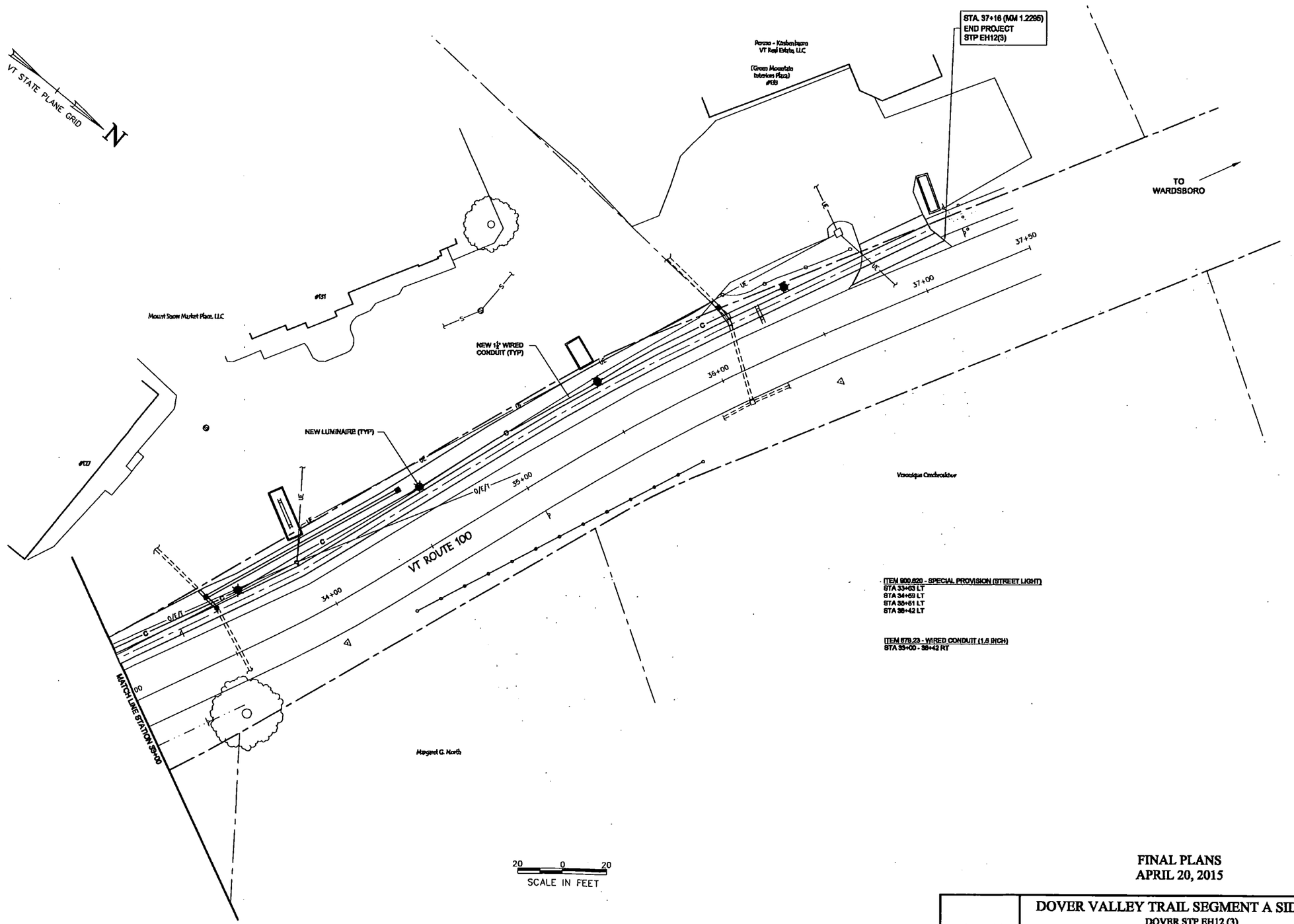
DESCRIPTION	WIRE	BRKR	CKT	Ø	CKT	BRKR	WIRE	DESCRIPTION
LUMINAIRES SOUTH	(2)#8, (1)#8G	20A-2P	1	A	2	20A-2P	(2)#8, (1)#8G	RECPTACLES: SOUTH
LUMINAIRES NORTH	(2)#8, (1)#8G	20A-2P	3	B	4	20A-2P	(2)#8, (1)#8G	RECPTACLES: NORTH
SPARE		20A-2P	5	A	6	20A-2P		SPARE

NOTES
1. PANEL TO BE NEMA 3R RATED (MIN) & LOCKABLE
2. EACH CIRCUIT TO BE PROVIDED WITH A SWITCHING TYPE CKT BKR
3. USE #8 CONDUCTORS (MIN). CONDUCTORS TO BE SIZED FOR MAX 3% VOLTAGE DROP.

POWER STANCHION DETAIL
NTS

FINAL PLANS
APRIL 20, 2015

LIGHTING PLAN	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP BH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Mann Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com LAD PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 28

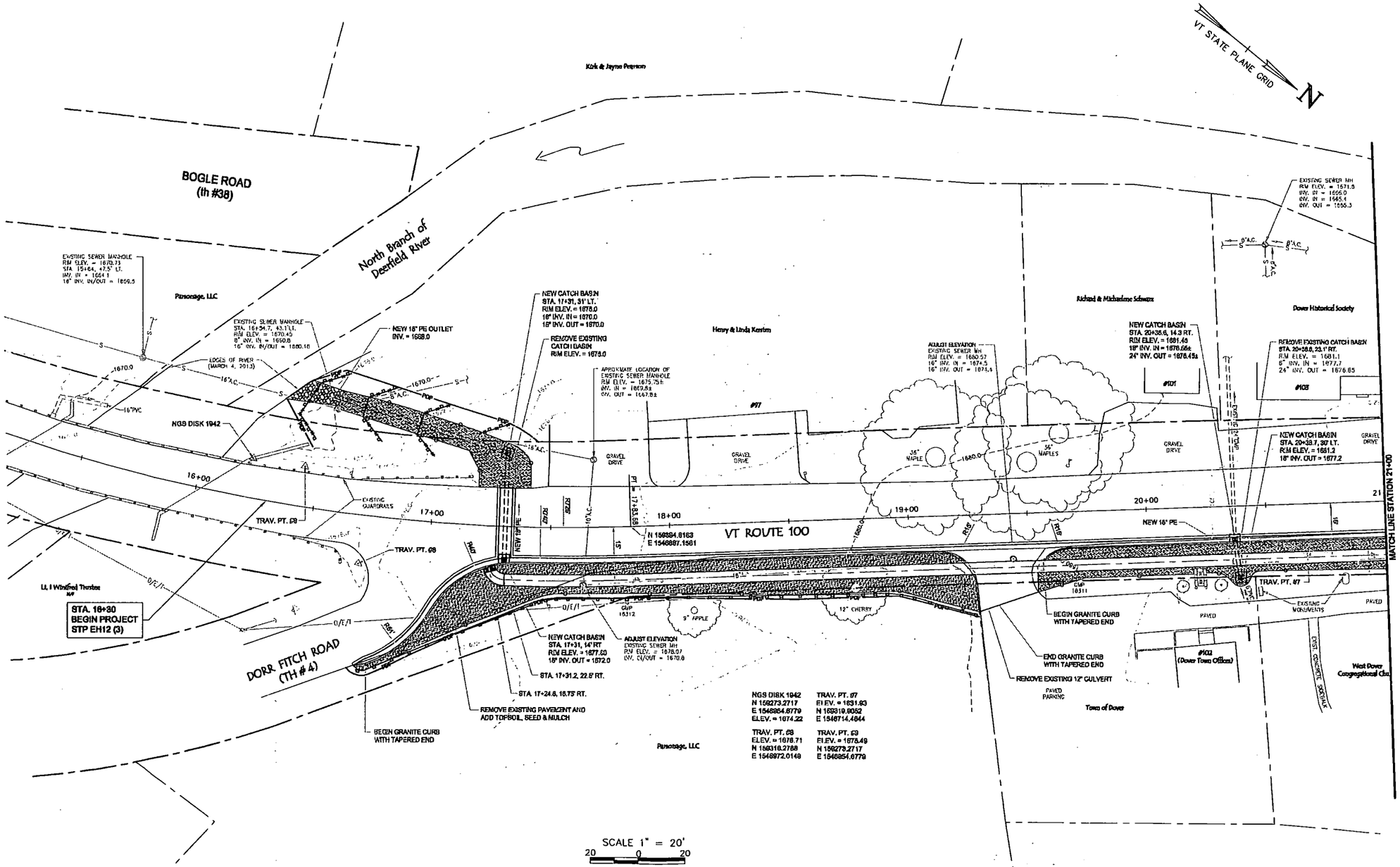


[ITEM 900.620 - SPECIAL PROVISION (STREET LIGHT)
STA 33+63 LT
STA 34+59 LT
STA 35+61 LT
STA 36+42 LT

[ITEM 878.23 - WIRED CONDUIT (1.5 INCH)
STA 35+00 - 36+42 RT

FINAL PLANS
APRIL 20, 2015

LIGHTING PLAN	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Mann Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com LAD PROJECT NO.: 12049 DRAWN BY: EH CHECKED BY: RD	SHEET: 29



Legend

- SURVEY CONTROL POINT
- RIGHT-OF-WAY BOUNDARY
- PROPERTY BOUNDARY
- NEW PERMANENT EASEMENT
- NEW TEMPORARY CONSTRUCTION EASEMENT
- PDF — PROJECT DEMARCATION FENCE
- TEMPORARY SILT FENCE WITH WOVEN WIRE
- TEMPORARY SILT FENCE
- SF — TEMPORARY INLET PROTECTION
- NEW TOPSOIL, SEED & MULCH AREA

FINAL PLANS
APRIL 20, 2015

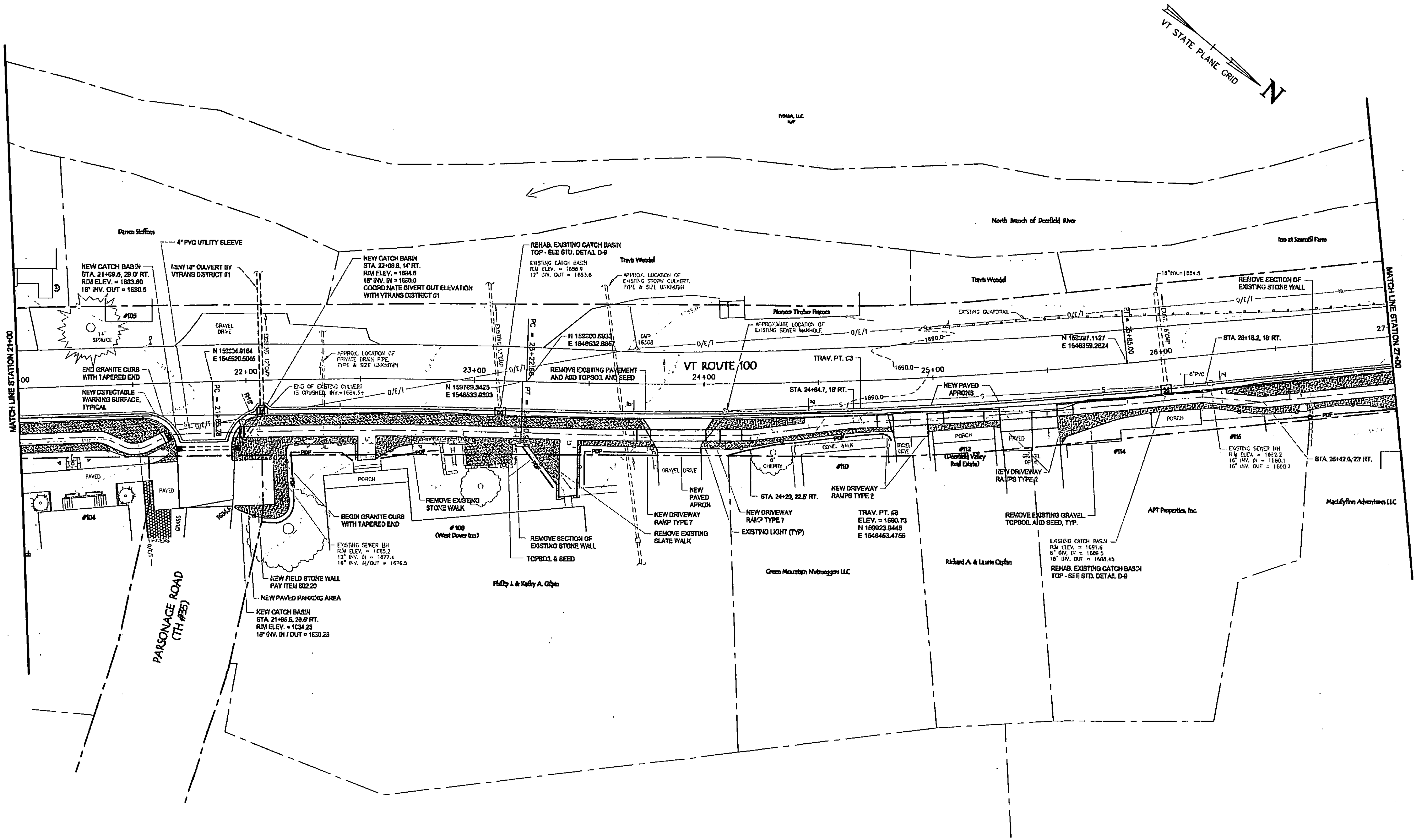
EROSION PREVENTION & SEDIMENT CONTROL

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
DOVER STP EH12 (3)

Lamoureux & Dickinson
Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4450 www.LDengineering.com

LAD PROJECT NO.: 12049
DRAWN BY: BH
CHECKED BY: RD

SHEET: 30



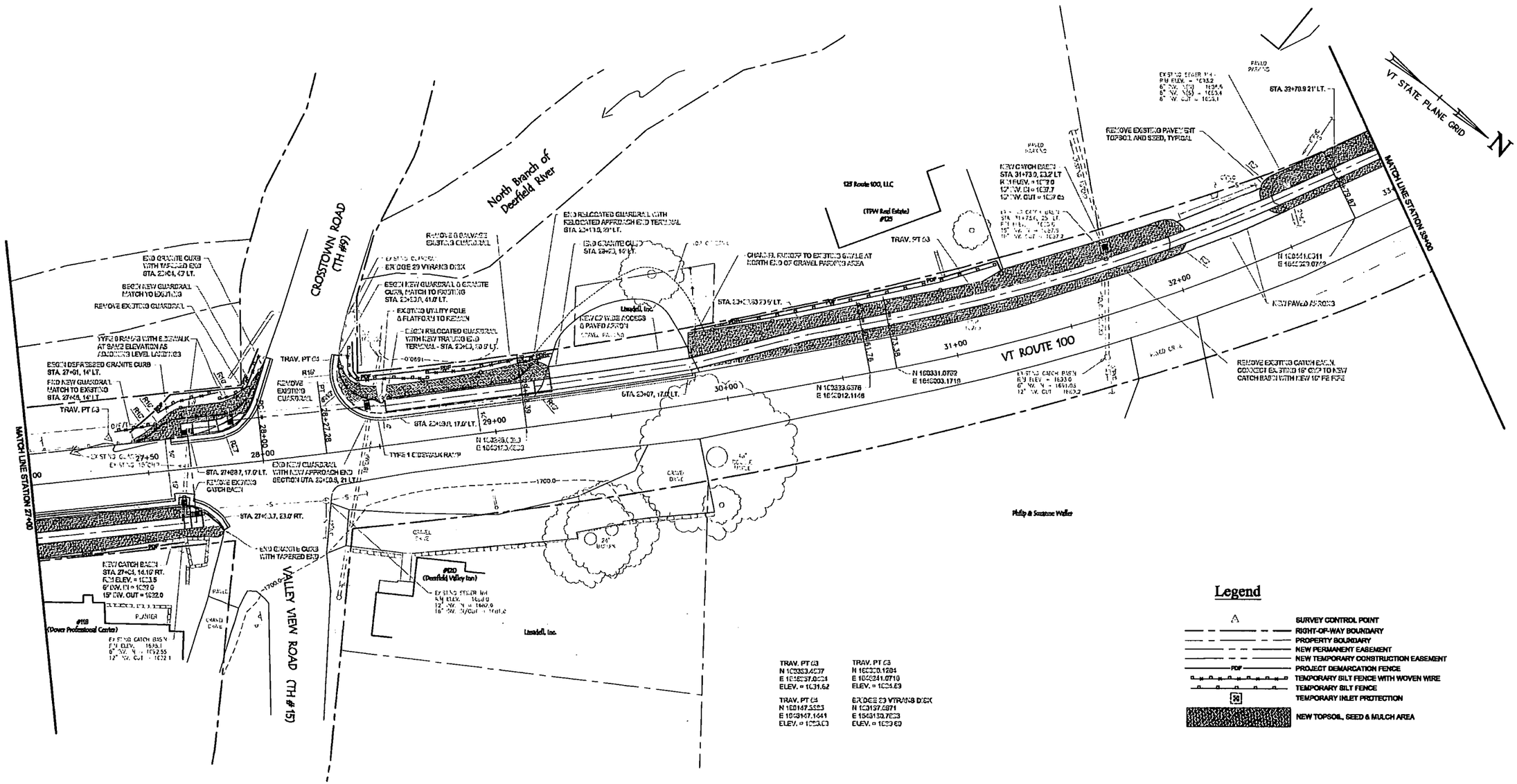
Legend

△	SURVEY CONTROL POINT
	RIGHT-OF-WAY BOUNDARY
	PROPERTY BOUNDARY
	NEW PERMANENT EASEMENT
	NEW TEMPORARY CONSTRUCTION EASEMENT
PDF	PROJECT DEMARCATION FENCE
	TEMPORARY SILT FENCE
	TEMPORARY INLET PROTECTION
	NEW TOPSOIL, SEED & MULCH AREA

SCALE 1" = 20'
20 0 20

FINAL PLANS
APRIL 20, 2015

EROSION PREVENTION & SEDIMENT CONTROL	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP BH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NO: 12049 DRAWN BY: BH CHECKED BY: RD	SHEET: 31



Legend

- SURVEY CONTROL POINT
- RIGHT-OF-WAY BOUNDARY
- PROPERTY BOUNDARY
- NEW PERMANENT EASEMENT
- NEW TEMPORARY CONSTRUCTION EASEMENT
- PROJECT DEMARCATION FENCE
- TEMPORARY SILT FENCE WITH WOVEN WIRE
- TEMPORARY SILT FENCE
- TEMPORARY INLET PROTECTION
- NEW TOPSOIL, SEED & MULCH AREA

FINAL PLANS
APRIL 20, 2015

EROSION PREVENTION & SEDIMENT CONTROL

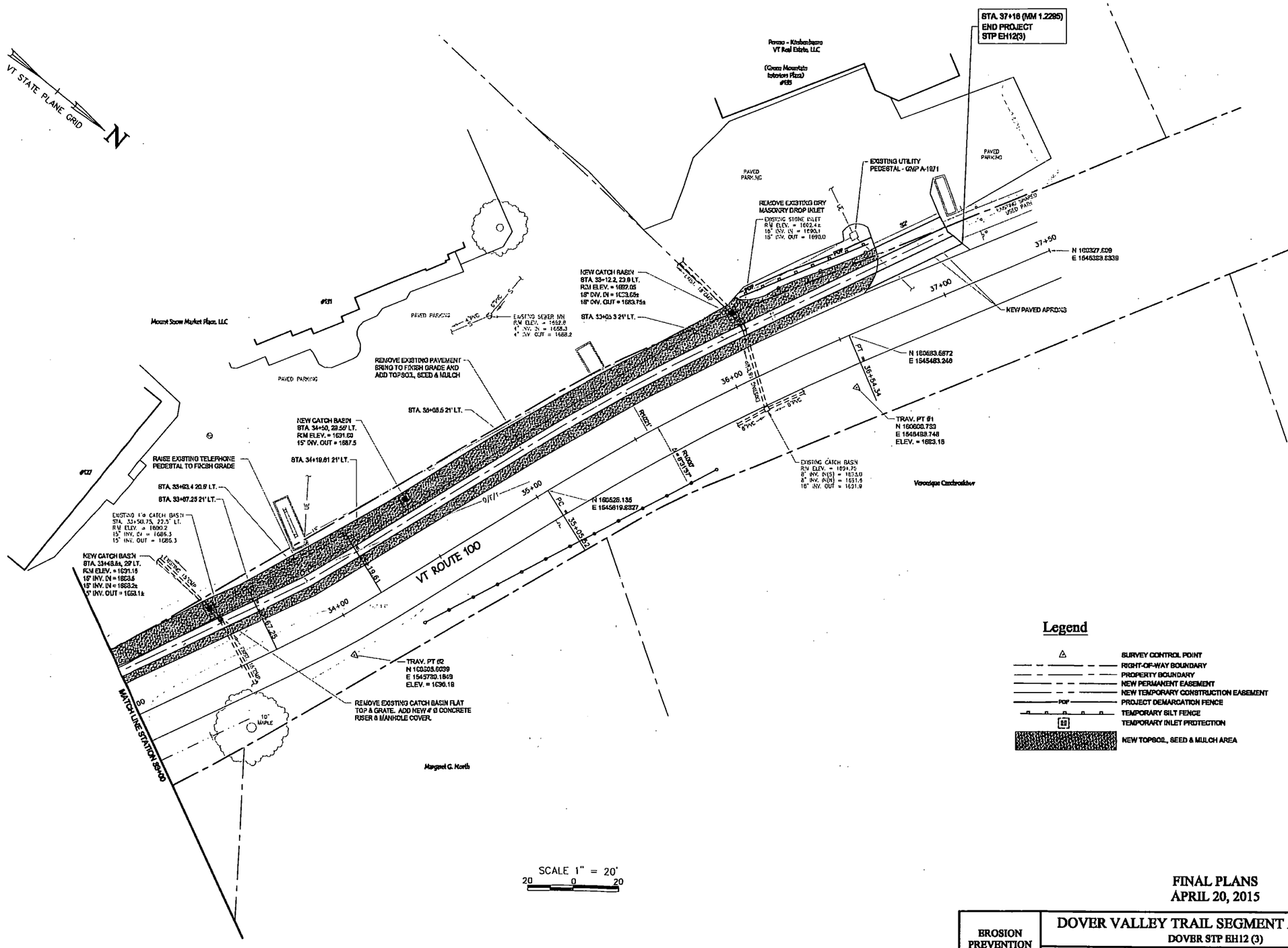
DOVER VALLEY TRAIL SEGMENT A SIDEWALK

DOVER STP BH12 (3)

Lamoureux & Dickinson Consulting Engineers, Inc.
14 Morse Drive, Essex, VT 05452
802-878-4430 www.LDengineering.com

L&D PROJECT NO.: 12049
DRAWN BY: BH
CHECKED BY: RD

SHEET: 32



Legend

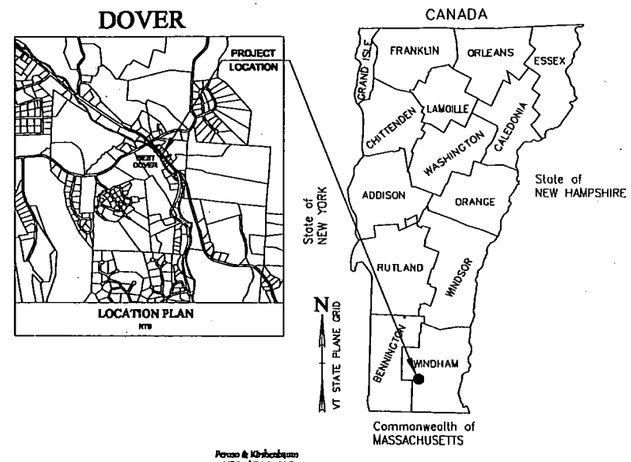
- SURVEY CONTROL POINT
- RIGHT-OF-WAY BOUNDARY
- PROPERTY BOUNDARY
- NEW PERMANENT EASEMENT
- NEW TEMPORARY CONSTRUCTION EASEMENT
- POF — PROJECT DEMARCATION FENCE
- TEMPORARY SILT FENCE
- TEMPORARY INLET PROTECTION
- NEW TOPSOIL, SEED & MULCH AREA

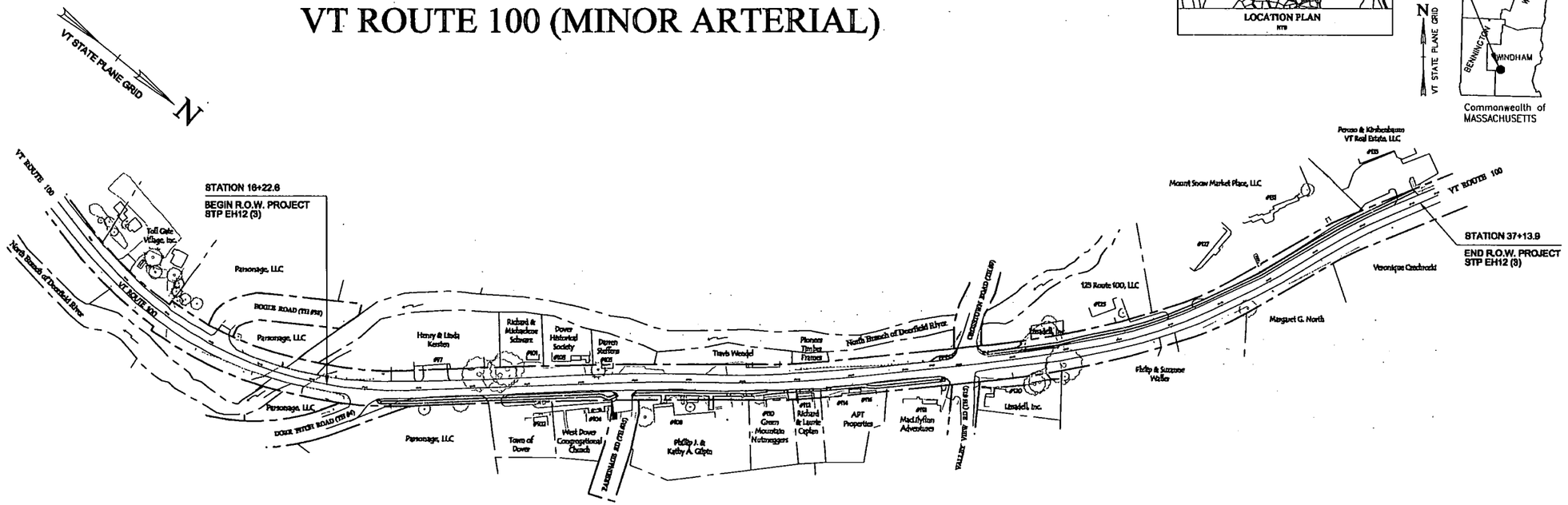
FINAL PLANS
APRIL 20, 2015

EROSION PREVENTION & SEDIMENT CONTROL	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson Consulting Engineers, Inc. 14 Mozzo Drive, Essex, VT 05452 802-878-4450 www.LDengineering.com L&D PROJECT NO.: 12049 DRAWN BY: EH CHECKED BY: RD	SHEET: 33

DOVER VALLEY TRAIL
SEGMENT A SIDEWALK STP EH12 (3)
TOWN OF DOVER, VERMONT

COUNTY OF WINDHAM
VT ROUTE 100 (MINOR ARTERIAL)





INDEX OF SHEETS

OVERALL SITE PLAN

0 100 200 300

SCALE: 1 INCH = 100 FEET

BEGINNING AT A POINT IN THE TOWN OF DOVER AND ADJACENT TO VT ROUTE 100 AT MM 0.900 AND EXTENDING NORTHERLY APPROXIMATELY 2,091 FEET (0.395 MILES) TO MM 1.295.

LENGTH OF SIDEWALK 1,930 FEET 0.366 MILES
LENGTH OF PROJECT 2,091 FEET 0.395 MILES

WORK TO BE PERFORMED UNDER THIS CONTRACT INCLUDES STREETSCAPE, SIDEWALKS, CURBS, DRAINAGE, PAVEMENT MARKINGS, SIGNS AND OTHER HIGHWAY RELATED ITEMS.

THE RIGHT-OF-WAY FOR VERMONT ROUTE 100 AS SHOWN ON THESE PLANS IS BASED ON THE 1964 ROUTE 100 RIGHT-OF-WAY PLANS AS SUPPLIED TO THIS OFFICE BY THE RIGHT-OF-WAY SECTION OF THE VERMONT AGENCY OF TRANSPORTATION.

QUALITY ASSURANCE PROGRAM:
INSPECTION LEVEL 3

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83(1996)

THIS SHEET FOR RIGHT-OF-WAY USE ONLY

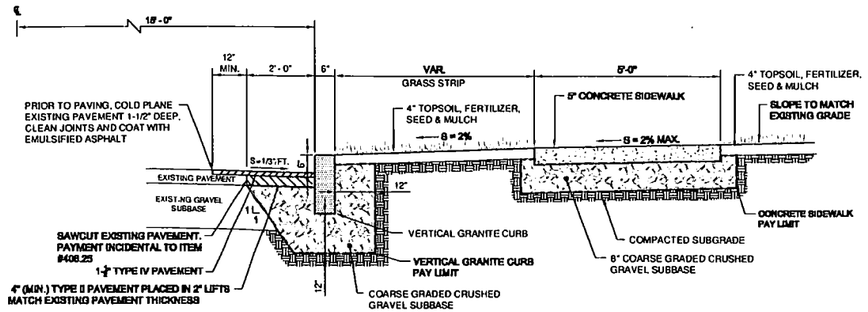
RIGHT-OF-WAY PLANS
JULY 30, 2014

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
DOVER STP EH12 (3)

Lamoureux & Dickinson

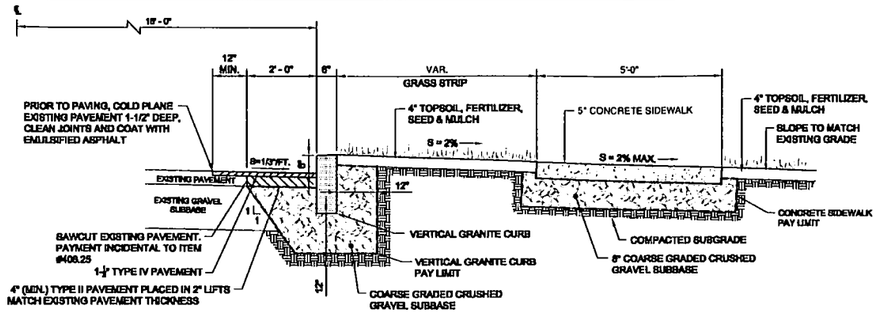
L&D PROJECT NO.: 12049
DRAWN BY: L&D
CHECKED BY: RD/DH

1
SHEET 34



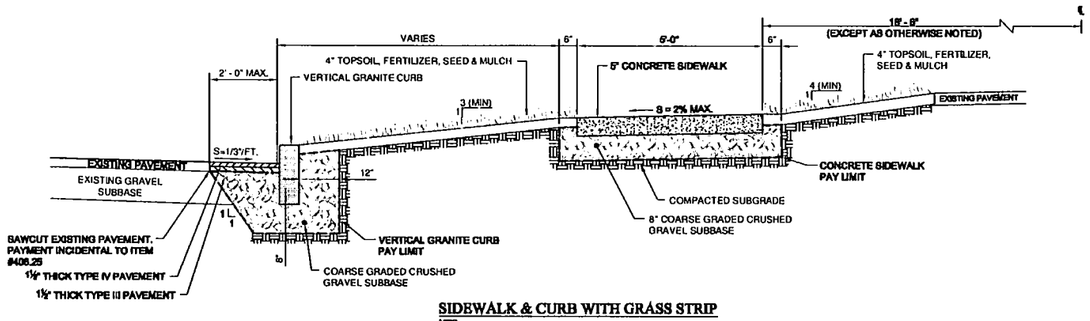
SIDEWALK & CURB WITH GRASS STRIP SLOPED TOWARDS ROAD
NTS

Sta 19+56 to Sta 21+51 RT
Sta 21+64 to Sta 24+43 RT
Sta 26+27 to Sta 27+71 RT



SIDEWALK & CURB WITH GRASS STRIP SLOPED AWAY FROM ROAD
NTS

CURB ONLY: Sta 16+78 to Sta 17+23 RT
CURB & SIDEWALK: Sta 17+23 to Sta 19+25 RT

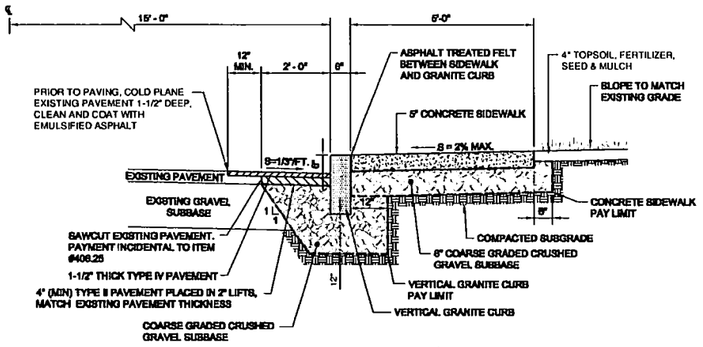


SIDEWALK & CURB WITH GRASS STRIP
NTS

Sta 32+48 to Sta 38+10 LT

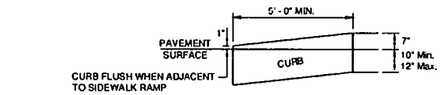
BITUMINOUS CONCRETE PAVEMENT NOTES

1. THE CONTRACTOR SHALL APPLY EMULSION TO THE FULL WIDTH OF THE BASE COURSE/EXISTING PAVEMENT BEFORE INSTALLING THE TYPE III PAVEMENT OVERLAY. EMULSION SHALL ALSO BE PLACED ON THE FACE OF THE CURB, THE EDGES OF EXISTING PAVEMENT AND THE EDGES OF NEW SIDEWALKS WHERE IT WILL BE IN CONTACT WITH THE PAVEMENT. EMULSIFIED ASPHALT TO BE APPLIED AT THE RATE OF 0.015 GAL./SQ YD.
2. BITUMINOUS CONCRETE PAVEMENT TOLERANCE = 1/4" (FOR TOTAL THICKNESS OF BINDER AND/OR WEARING COURSE).
3. BITUMINOUS CONCRETE PAVEMENT SHALL BE 75 BLOW MARSHALL MIX AND PERFORMANCE GRADED BINDER SHALL BE PG 64-34.

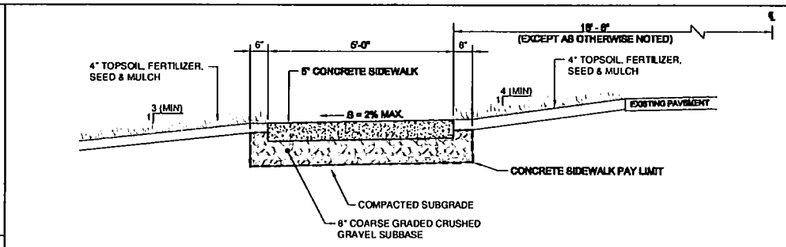


SIDEWALK & CURB SECTION WITH NO GRASS STRIP
NTS

Sta 21+51 to Sta 21+68 RT
Sta 24+43 to Sta 26+27 RT

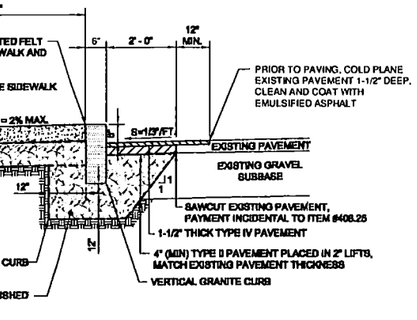


VERTICAL GRANITE CURB END SECTION
NTS



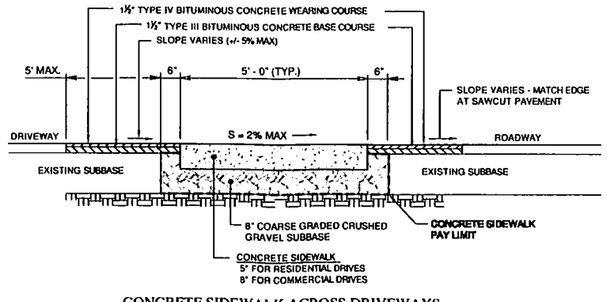
SIDEWALK WITH GRASS STRIP
NTS

Sta 29+67 to Sta 32+48 LT
Sta 38+10 to Sta 39+79 LT



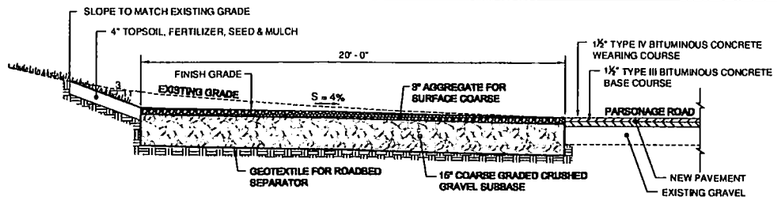
SIDEWALK & CURB SECTION WITH NO GRASS STRIP
NTS

Sta 27+66 to Sta 27+85 LT (NO REVEAL)
Sta 28+40 to Sta 29+16 LT



CONCRETE SIDEWALK ACROSS DRIVEWAYS
NTS

Sta 19+25 to Sta 19+56 RT
Sta 29+16 to Sta 29+87 LT
Sta 32+09 to Sta 32+46 LT
Sta 38+79 to Sta 37+12 LT



PARSONAGE ROAD GRAVEL PARKING
NTS

THIS SHEET FOR RIGHT-OF-WAY USE ONLY

RIGHT-OF-WAY PLANS
JULY 30, 2014

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
DOVER STP BH12 (3)

Lamoureux & Dickinson

L&D PROJECT NO.: 12049
DRAWN BY: BH
CHECKED BY: RDVDH

SHEET: 2
SHEET 35

TABLE OF PROJECT PROPERTY ACQUISITION DETAIL SHEET

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING (IN S.F.)	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1	HENRY H. KERSTEN	4	16+22.6, 39' LT	17+47.5, 39' LT	1,862 s.f.	CONST. (T)						
	LINDA K. KERSTEN		16+31.0, 44' LT	17+13.0, 39' LT		CUL. (P), DIT. (P) & DR. (P)						INCLUDES RIGHT TO INSTALL & REMOVE PROJECT DEMARCATION FENCE AND PLACE TOPSOIL, SEED & MULCH
2	PARSONAGE, LLC	4	17+73.0, 32' RT	19+29.9, 46' RT	726 s.f.	CONST. (T)						INCLUDES RIGHT TO INSTALL & REMOVE PROJECT DEMARCATION FENCE AND PLACE TOPSOIL, SEED & MULCH
			18+14.9, 29' RT	19+28.4, 41' RT	350 s.f.	SLOPE (T)						
3	PHILLIP J. GILPIN	5	22+05.9, 60' RT	22+16.7, 57' RT	258 s.f.	SLOPE (T)						INCLUDES RIGHT TO INSTALL & REMOVE PROJECT DEMARCATION FENCE AND PLACE TOPSOIL, SEED & MULCH
	KATHY A. GILPIN		22+06.2, 62' RT	22+18.8, 58' RT	76 s.f.	CONST. (T)						INCLUDES RIGHT TO INSTALL & REMOVE PROJECT DEMARCATION FENCE AND PLACE TOPSOIL, SEED & MULCH
			22+42.8, 33' RT	22+69.5, 33' RT	39 s.f.	CONST. (T)						INCLUDES RIGHT TO INSTALL & REMOVE PROJECT DEMARCATION FENCE AND PLACE TOPSOIL, SEED & MULCH
			22+96.7, 33' RT	23+17.4, 33' RT	93 s.f.	CONST. (T)						INCLUDES RIGHT TO INSTALL & REMOVE PROJECT DEMARCATION FENCE AND PLACE TOPSOIL, SEED & MULCH
			23+69.2 RT			DRIVE (T)						NEW 30' WIDE DRIVEWAY APRON
4	GREEN MOUNTAIN NUTMEGGERS LLC	5	24+69.4 RT			DRIVE (T)						NEW 15' WIDE DRIVEWAY APRON
5	RICHARD CAPLAN	5	24+69.4 RT			DRIVE (T)						NEW 15' WIDE DRIVEWAY APRON
	LAURIE CAPLAN		25+40.2 RT			DRIVE (T)						NEW 25' WIDE DRIVEWAY APRON
6	APT PROPERTIES, INC.	5	25+40.2 RT			DRIVE (T)						NEW 25' WIDE DRIVEWAY APRON
7	MACILYFINN ADVENTURES, L.L.C.	5 & 6	29+75.8, 33' RT	27+82.4, 33' RT	242 s.f.	CONST. (T)						
8	LISSADELL, INC.	6	29+60.4 LT			DRIVE (T)						NEW 60' WIDE DRIVEWAY APRON
			29+91.9, 33' LT	29+93.6, 58' LT		DIT. (P) & DR. (P)						
9	MOUNT SNOW MARKET PLACE, LLC	6 & 7	31+78.7 LT			CULV. (P) & DR. (P)						INCLUDES RIGHT TO INSTALL & MAINTAIN A CATCH BASIN
			33+54.0 LT			CULV. (P) & DR. (P)						INCLUDES RIGHT TO INSTALL & MAINTAIN A CATCH BASIN
			36+12.0 LT			CULV. (P) & DR. (P)						INCLUDES RIGHT TO INSTALL & MAINTAIN A CATCH BASIN
			31+79.7, 39' LT	36+11.9, 30' LT	4,304 s.f.	CONST. (T)						INCLUDES RIGHT TO INSTALL & REMOVE PROJECT DEMARCATION FENCE AND PLACE TOPSOIL, SEED & MULCH
			32+28.1 LT			DRIVE (T)						NEW 35' WIDE DRIVEWAY APRON
10	PERUSO-KIRSHENBAUM VT REAL ESTATE, LLC.	7	36+12.0 LT			CULV. (P) & DR. (P)						INCLUDES RIGHT TO INSTALL & MAINTAIN A CATCH BASIN
			36+08.1, 40' LT	37+12.1, 27' LT	347 s.f.	SLOPE (T)						
			36+08.1, 40' LT	37+14.0, 27' LT	709 s.f.	CONST. (T)						INCLUDES RIGHT TO INSTALL & REMOVE PROJECT DEMARCATION FENCE AND PLACE TOPSOIL, SEED & MULCH
			36+98.0 LT			DRIVE (T)						NEW 35' WIDE DRIVEWAY APRON

(T) TEMPORARY EASEMENT
(P) PERMANENT EASEMENT
CONST. (T) CONSTRUCTION EASEMENT
SIDEWALK (P) SIDEWALK EASEMENT

DRIVE (P) DRIVE EASEMENT
DRIVE (T) DRIVE EASEMENT
CUL. (P) CULVERT RIGHT
DR. (P) DRAINAGE RIGHT
DITCH (P) DITCH RIGHT

TABLE OF REVISIONS

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

THIS SHEET FOR RIGHT-OF-WAY USE ONLY

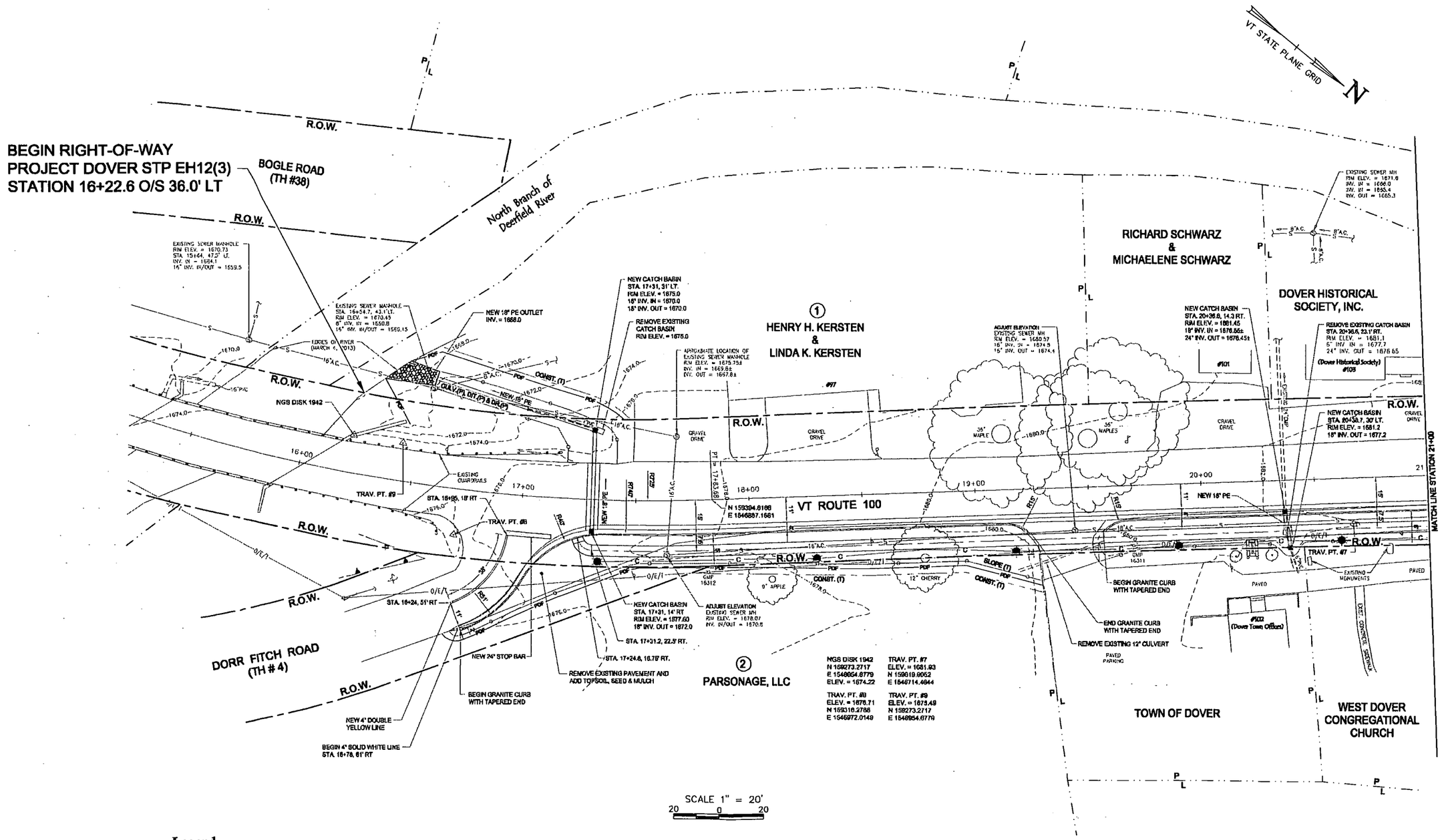
RIGHT-OF-WAY PLANS
JULY 30, 2014

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
DOVER STP BH12 (3)

Lamoureux & Dickinson

L&D PROJECT NO.: 12049
DRAWN BY: BH
CHECKED BY: RLVDH

SHEET: 3
SHEET 36



Legend

△	SURVEY CONTROL POINT
R.O.W.	RIGHT-OF-WAY BOUNDARY
P L	ABUTTING PROPERTY BOUNDARY
SIDEWALK (P)	NEW PERMANENT EASEMENT
CONST (T)	NEW TEMPORARY CONSTRUCTION EASEMENT
SLOPE (T)	NEW TEMPORARY SLOPE EASEMENT
PDF	PROJECT DEMARCATION FENCE

THIS SHEET FOR RIGHT-OF-WAY USE ONLY

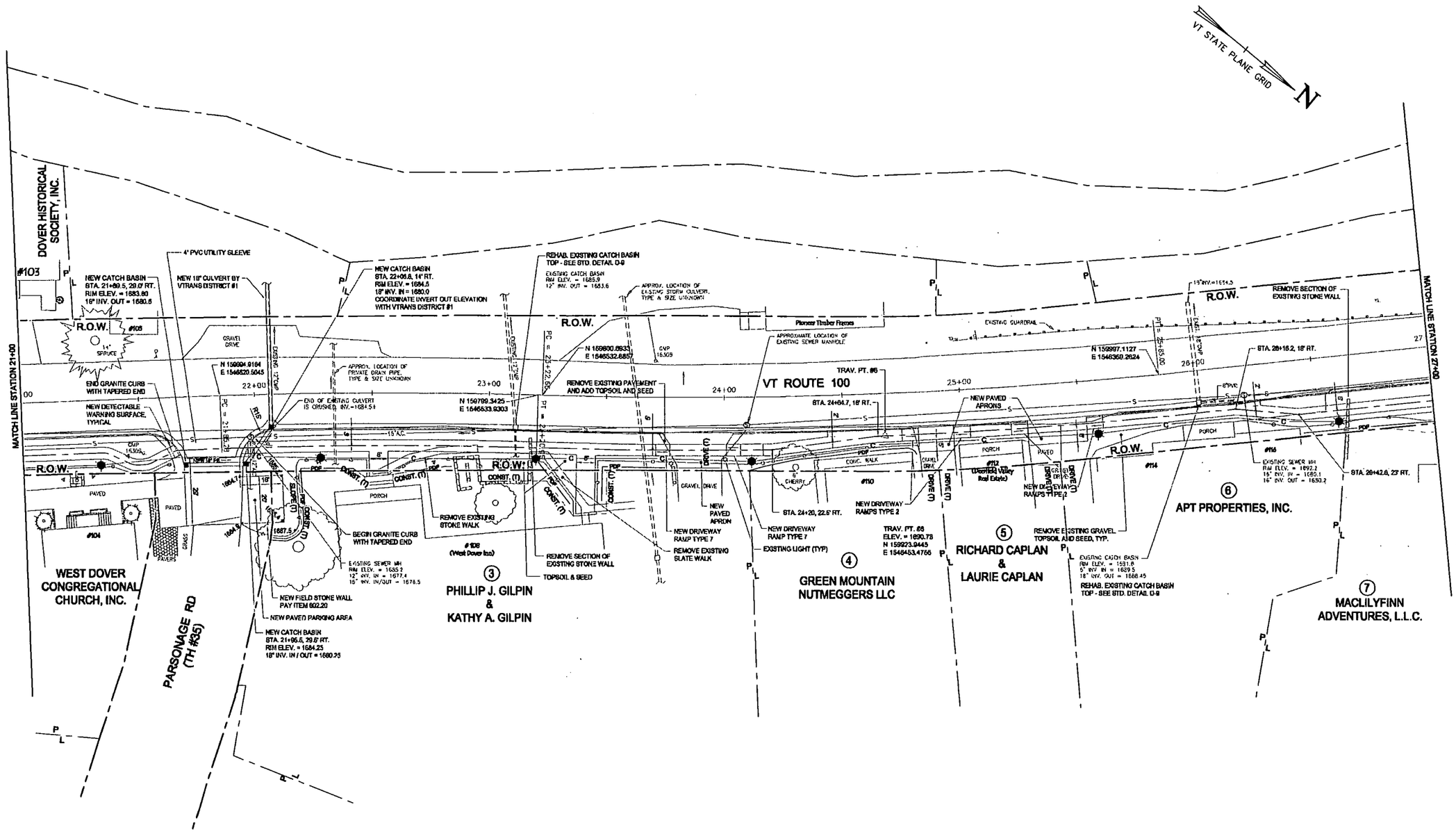
RIGHT-OF-WAY PLANS
JULY 30, 2014

DOVER VALLEY TRAIL SEGMENT A SIDEWALK
DOVER STP EH12 (3)

Lamoureux & Dickinson

L&D PROJECT NO.: 12049
DRAWN BY: BH
CHECKED BY: RD/DH

4
SHEET 37



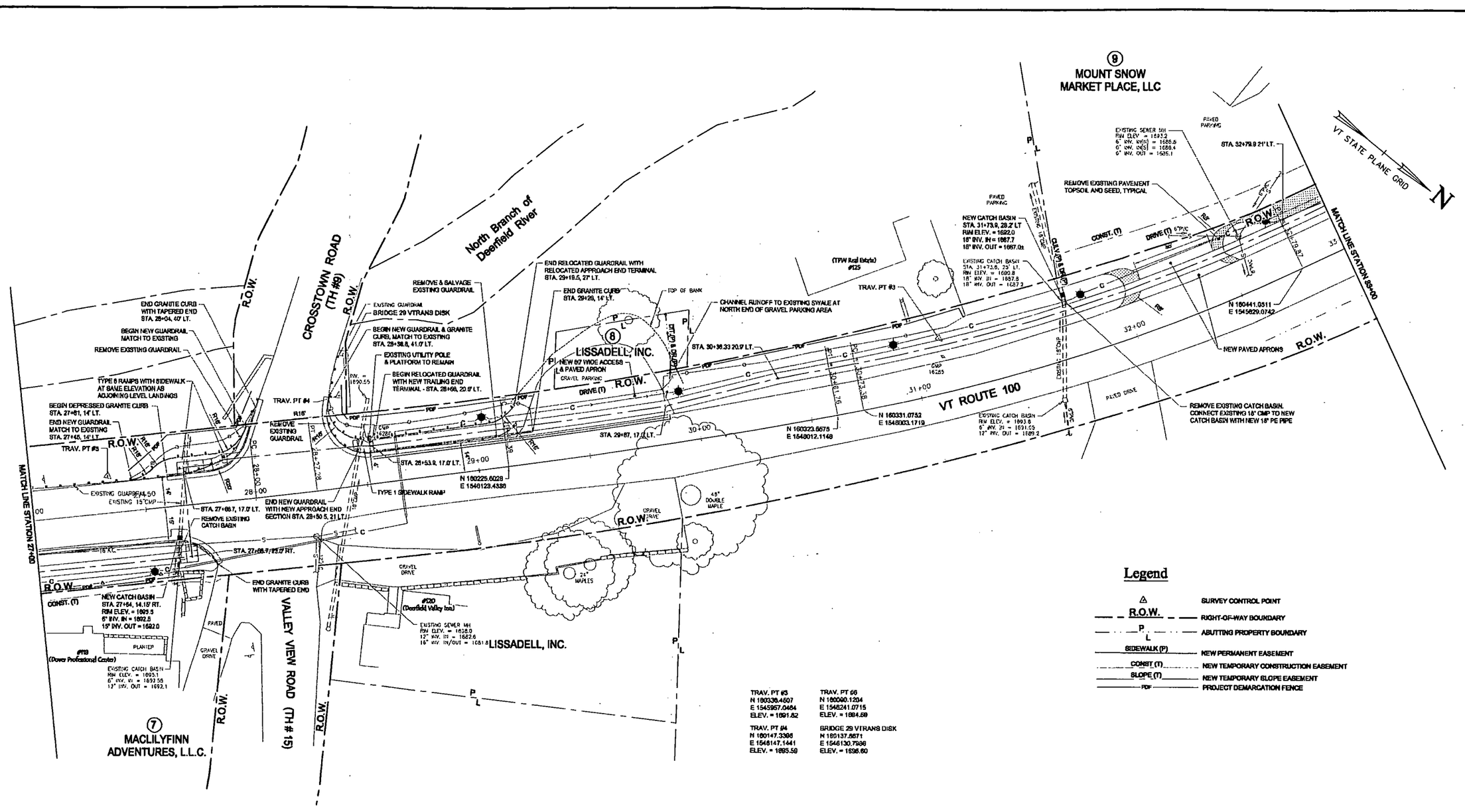
Legend

- △ SURVEY CONTROL POINT
- R.O.W. RIGHT-OF-WAY BOUNDARY
- P L ABUTTING PROPERTY BOUNDARY
- SIDEWALK (P) NEW PERMANENT EASEMENT
- CONST (T) NEW TEMPORARY CONSTRUCTION EASEMENT
- SLOPE (T) NEW TEMPORARY SLOPE EASEMENT
- POF PROJECT DEMARCATION FENCE

SCALE 1" = 20'
20 0 20

THIS SHEET FOR RIGHT-OF-WAY USE ONLY

RIGHT-OF-WAY PLANS JULY 30, 2014	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP BH12 (3)	
	Lamoureux & Dickinson L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RLV/DH	5 SHEET 38



Legend

- SURVEY CONTROL POINT
- R.O.W. — RIGHT-OF-WAY BOUNDARY
- P L — ABUTTING PROPERTY BOUNDARY
- SIDEWALK (P) — NEW PERMANENT EASEMENT
- CONST (T) — NEW TEMPORARY CONSTRUCTION EASEMENT
- SLOPE (T) — NEW TEMPORARY SLOPE EASEMENT
- PDF — PROJECT DEMARCATION FENCE

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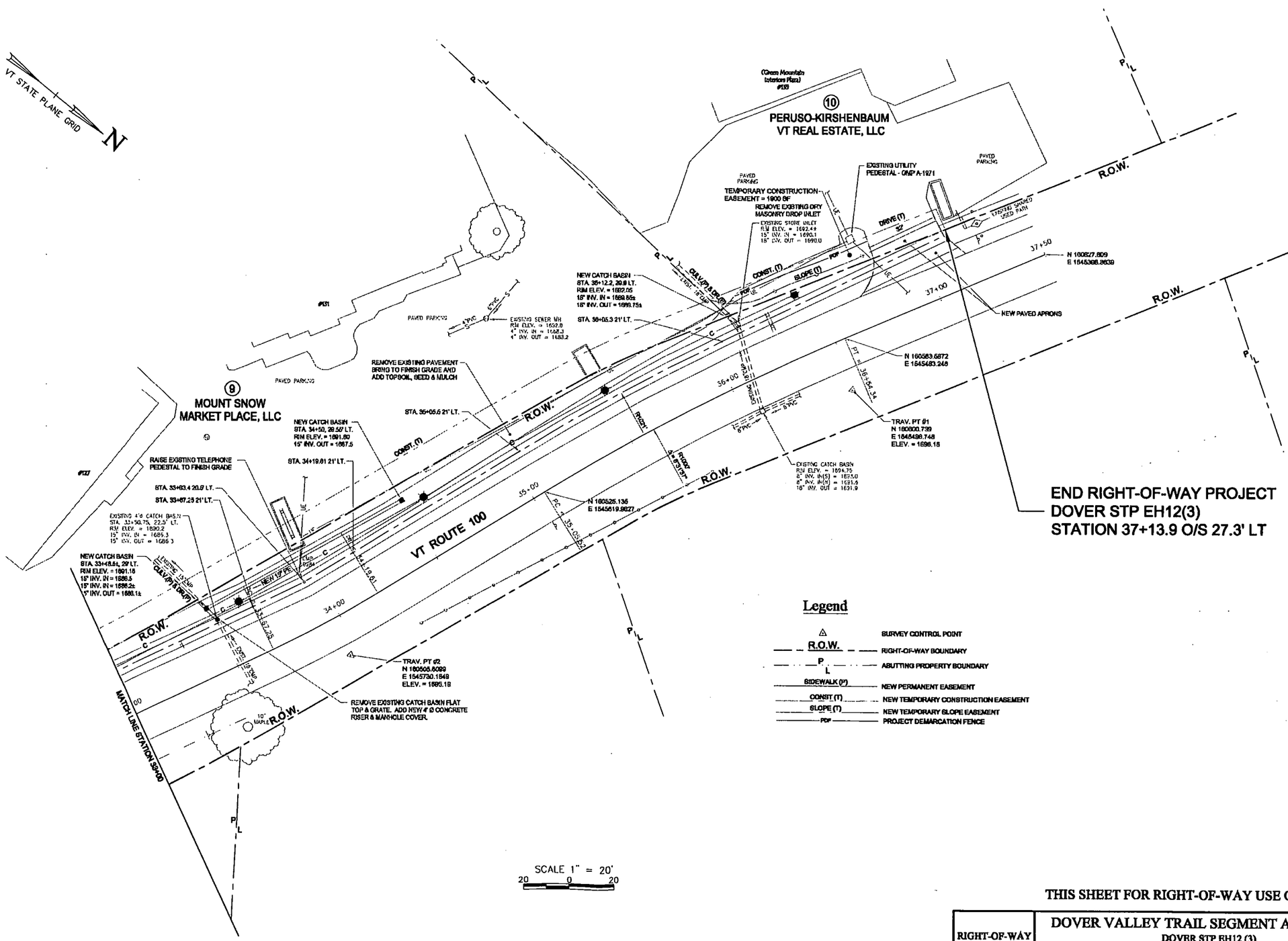
RIGHT-OF-WAY PLANS JULY 30, 2014	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson L&D PROJECT NO.: 12049 DRAWN BY: EH CHECKED BY: RD/DH	6 SHEET 39



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RIGHT-OF-WAY PLANS JULY 30, 2014	DOVER VALLEY TRAIL SEGMENT A SIDEWALK DOVER STP EH12 (3)	
	Lamoureux & Dickinson L&D PROJECT NO.: 12049 DRAWN BY: BH CHECKED BY: RD/DH	7 SHEET 40